

MARITIME ENVIRONMENT PROTECTION
COMMITTEE
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Agenda item 15

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**REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE
ON ITS SEVENTY-SIXTH SESSION**

Section		Page
1	INTRODUCTION – ADOPTION OF THE AGENDA	4
2	DECISIONS OF OTHER BODIES	6
3	CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS	7
4	HARMFUL AQUATIC ORGANISMS IN BALLAST WATER	13
5	AIR POLLUTION PREVENTION	17
6	ENERGY EFFICIENCY OF SHIPS	21
7	REDUCTION OF GHG EMISSIONS FROM SHIPS	23
8	FOLLOW-UP WORK EMANATING FROM THE ACTION PLAN TO ADDRESS MARINE PLASTIC LITTER FROM SHIPS	53
9	POLLUTION PREVENTION AND RESPONSE	53
10	REPORTS OF OTHER SUB-COMMITTEES	56
11	TECHNICAL COOPERATION ACTIVITIES FOR THE PROTECTION OF THE MARINE ENVIRONMENT	57
12	WORK PROGRAMME OF THE COMMITTEE AND SUBSIDIARY BODIES	58
13	ANY OTHER BUSINESS	65
14	CONSIDERATION OF THE REPORT OF THE COMMITTEE	66
15	ACTION REQUESTED OF OTHER IMO ORGANS	66

LIST OF ANNEXES

- ANNEX 1 RESOLUTION MEPC.328(76) - AMENDMENTS TO MARPOL ANNEX VI (2021 REVISED MARPOL ANNEX VI)
- ANNEX 2 RESOLUTION MEPC.329(76) - AMENDMENTS TO MARPOL ANNEX I (PROHIBITION ON THE USE AND CARRIAGE FOR USE AS FUEL OF HEAVY FUEL OIL BY SHIPS IN ARCTIC WATERS)
- ANNEX 3 RESOLUTION MEPC.330(76) - AMENDMENTS TO MARPOL ANNEXES I AND IV (EXEMPTION OF UNMANNED NON-SELF-PROPELLED BARGES FROM CERTAIN SURVEY AND CERTIFICATION REQUIREMENTS)
- ANNEX 4 RESOLUTION MEPC.331(76) - AMENDMENTS TO THE AFS I CONVENTION (CONTROLS ON CYBUTRYNE AND FORM OF THE INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE)
- ANNEX 5 RESOLUTION MEPC.332(76) AMENDMENTS TO THE 2018 GUIDELINES ON THE METHOD OF CALCULATION OF THE ATTAINED ENERGY EFFICIENCY DESIGN INDEX (EEDI) FOR NEW SHIPS (RESOLUTION MEPC.308(73), AS AMENDED BY RESOLUTION MEPC.322(74))
- ANNEX 6 UNIFIED INTERPRETATION TO REGULATION 2.23 OF MARPOL ANNEX VI
- ANNEX 7 RESOLUTION MEPC.333(76) - 2021 GUIDELINES ON THE METHOD OF CALCULATION OF THE ATTAINED ENERGY EFFICIENCY EXISTING SHIP INDEX (EEXI)
- ANNEX 8 RESOLUTION MEPC.334(76) - 2021 GUIDELINES ON SURVEY AND CERTIFICATION OF THE ENERGY EFFICIENCY EXISTING SHIP INDEX (EEXI)
- ANNEX 9 RESOLUTION MEPC.335(76) - 2021 GUIDELINES ON THE SHAFT/ENGINE POWER LIMITATION SYSTEM TO COMPLY WITH THE EEXI REQUIREMENTS AND USE OF A POWER RESERVE
- ANNEX 10 RESOLUTION MEPC.336(76) - 2021 GUIDELINES ON OPERATIONAL CARBON INTENSITY INDICATORS AND THE CALCULATION METHODS (CII GUIDELINES, G1)
- ANNEX 11 RESOLUTION MEPC.337(76) - 2021 GUIDELINES ON THE REFERENCE LINES FOR USE WITH OPERATIONAL CARBON INTENSITY INDICATORS (CII REFERENCE LINES GUIDELINES, G2)
- ANNEX 12 RESOLUTION MEPC.338(76) - 2021 GUIDELINES ON THE OPERATIONAL CARBON INTENSITY REDUCTION FACTORS RELATIVE TO REFERENCE LINES (CII REDUCTION FACTOR GUIDELINES, G3)
- ANNEX 13 RESOLUTION MEPC.339(76) - 2021 GUIDELINES ON THE OPERATIONAL CARBON INTENSITY RATING OF SHIPS (CII RATING GUIDELINES, G4)

- ANNEX 14 WORK PLAN FOR DEVELOPMENT OF MID- AND LONG-TERM MEASURES AS A FOLLOW-UP OF THE INITIAL IMO STRATEGY ON REDUCTION OF GHG EMISSIONS FROM SHIPS
- ANNEX 15 BIENNIAL AGENDA OF THE PPR SUB-COMMITTEE FOR THE 2022-2023 BIENNIUM
- ANNEX 16 PROVISIONAL AGENDA FOR PPR 9
- ANNEX 17 STATUS REPORT OF THE OUTPUTS OF MEPC FOR THE 2020-2021 BIENNIUM
- ANNEX 18 POST-BIENNIAL AGENDA OF MEPC
- ANNEX 19 ITEMS TO BE INCLUDED IN THE AGENDA OF MEPC 77
- ANNEX 20 STATEMENTS BY DELEGATIONS AND OBSERVERS

1 INTRODUCTION – ADOPTION OF THE AGENDA

1.1 The seventy-sixth session of the Marine Environment Protection Committee was held remotely from 10 to 17 June 2021, chaired by Mr. H. Saito (Japan). The Vice-Chair of the Committee, Mr. H. Conway (Liberia), was also present.

1.2 The session was attended by 122 Members and 3 Associate Members; 5 representatives from the United Nations Programmes, specialized agencies and other entities; 11 observers from intergovernmental organizations with agreements of cooperation; and 50 observers from non-governmental organizations in consultative status, as listed in document MEPC 76/INF.1.

Opening address of the Secretary-General

1.3 The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link:

<https://www.imo.org/en/MediaCentre/SecretaryGeneral/Pages/Secretary-GeneralsSpeechesToMeetings.aspx>

Chair's remarks

1.4 The Chair thanked the Secretary-General for his opening address and stated that his advice and requests would be given every consideration in the deliberations of the Committee.

Statements by delegations

1.5 The delegations of China, the Democratic People's Republic of Korea and the Republic of Korea expressed concerns with regard to the Japanese Government's decision to dispose of the contaminated water from the Fukushima nuclear plant accident by discharging it into the sea, and invited Japan to re-evaluate this decision and to provide more information. In addition, the delegations of China, France and the Russian Federation expressed the view that this matter should be further considered under other forums such as the International Atomic Energy Agency (IAEA); in this regard the Committee also noted that the Secretariat maintained a close relationship and cooperation with IAEA. The delegation of Japan stated that the water would be treated and therefore would not be contaminated but would be discharged into the sea in accordance with relevant domestic and international regulations, and that the Government of Japan had already provided information to relevant forums including IAEA. The full text of the statements made by the delegations of China, the Democratic People's Republic of Korea and Japan are set out in annex 20.

1.6 The delegation of Georgia made a statement highlighting the importance both of the marine environment and of seafarers, making reference to World Oceans Day and the Day of the Seafarer, noting that the former's theme this year was "The Oceans: Life and Livelihoods". The full text of the statement made by the delegation of Georgia is set out in annex 20.

1.7 The observer from Pacific Environment made a statement highlighting the importance of the Arctic and its vulnerability to a number of threats including climate change and the emissions of greenhouse gases and Black Carbon, as well as oil spills, wastewater, chemicals, garbage and noise pollution. The full text of the statement made by the observer from Pacific Environment is set out in annex 20.

Measures taken to facilitate the remote session

1.8 The Committee recalled that at the joint extraordinary session of all IMO Committees (ALCOM/ES), held in September 2020, the Committees jointly approved *Interim guidance to facilitate remote sessions of the Committees during the COVID-19 pandemic* (MSC-LEG-MEPC-TCC-FAL.1/Circ.1), and had agreed in particular to:

- .1 waive rule 3 of their respective rules of procedure, in part, to allow sessions to be held remotely;
- .2 accept, for the purpose of facilitating remote sessions, electronically submitted credentials, with originals to follow; and
- .3 consider Members that had submitted valid credentials, were registered at OMRS and were listed as participants in the remote session, as "present" within rule 28(1) of its rules of procedure.

Adoption of the agenda and related matters

1.9 The Committee adopted the agenda (MEPC 76/1) and agreed to be guided in its work by the provisional timetable (MEPC 76/1/1, annex 1).

1.10 The Committee noted document MEPC 76/1/1 (Chair) setting out the proposals by the Chair with regard to arrangements for the remote session, taking into account the *Interim guidance to facilitate remote sessions of the Committees during the COVID-19 pandemic* and in consultation with the Secretariat, including duration of the virtual meeting of the remote session of MEPC 76.

1.11 In this context, the Committee noted that the Chair, having considered the number of documents submitted to this session, the documents deferred, the experience gained from the conduct of the previous remote session and the urgent matters which needed to be considered at this session, had proposed in document MEPC 76/1/1 a one-day extension to the five-day duration of MEPC 76 that had been tentatively noted at the previous session.

1.12 Having noted that no objections had been received by the deadline of 19 May 2021 for commenting on the Chair's proposal, the Committee concurred with the Chair's proposal on the dates and duration of the session.

1.13 In this connection, the Committee agreed to further consider, under agenda item 12 (Work programme of the Committee and subsidiary bodies), the concerns expressed by the Russian Federation with regard to the procedure that should be followed by the Committee, as set out in annex 1 of document MEPC 76/1/1/Add.1 (see paragraph 12.13). The delegation of the Russian Federation, supported by the delegations of China, Malaysia, Saudi Arabia and the United Arab Emirates, while reconfirming its support for the extension of the duration of this session, also reiterated its view that the procedural and financial implications of this decision should be considered to ensure adherence to the Organization's rules and procedures in the future, and suggested the inclusion of the following in the report of the Committee:

"The Committee requests that relevant IMO procedures shall be strictly followed in future in respect of the consideration of the duration of the Committee's sessions or any other matters related to the conduct thereof, as well as with regard to any subsequent amendments of the adopted Reports of the Committee. The Committee forwards this issue for the review and endorsement by the Council and undertakes to provide for further extension of its sessions only after due consideration by the Council, including in terms of potential budgetary implications for the Organization".

1.14 The Committee also agreed to further consider, with a view to clarifying whether documents commenting on those documents deferred from previous sessions could be submitted by the seven-week deadline under agenda item 12 (Work programme of the Committee and subsidiary bodies), taking into account the comments made by Japan, as set out in annex 2 of document MEPC 76/1/1/Add.1 (see paragraph 12.[...]).

1.15 The delegation of Norway suggested considering document MEPC 76/7/10 (Australia et al.), containing a proposed work plan for the development of mid- and long-term measures following up on the Initial IMO GHG Strategy, earlier than shown in the timetable (MEPC 76/1/1, annex 1), arguing that priority should be given to the most widely co-sponsored document. The Committee agreed that this could be considered in due course depending on the progress of deliberations under agenda item 7.

1.16 Consequently, the Committee endorsed the Chair's proposals on the arrangements for the remote session as set out in document MEPC 76/1/1 and MEPC 76/1/1/Add.1(Chair).

1.17 In this context, the Committee further agreed to the Chair's proposals in relation to the documents considered by correspondence prior to the virtual meeting (MEPC 76/1/1, annex 2), having noted document MEPC 76/1/1/Add.1 providing a collation of all comments received by correspondence and explanations on how these comments had been addressed. The Committee noted that the above-mentioned Chair's proposals would be reflected under relevant agenda items.

1.18 The Committee also agreed to postpone the consideration of the documents listed in annex 3 to document MEPC 76/1/1 to MEPC 77.

1.19 The delegation of the Islamic Republic of Iran expressed concerns over the use of the term "Arabian Gulf" in document MEPC 76/INF.65 (FOEI) and recalled that, in accordance with UN resolution ST/CS/SER.A/29, the correct term should be "Persian Gulf". The full text of the statement made by the delegation of the Islamic Republic of Iran is set out in annex 20.

Credentials

1.20 The Committee noted that the credentials of 111 delegations attending the session were in due and proper form.

2 DECISIONS OF OTHER BODIES

2.1 Following consideration by correspondence, prior to the virtual meeting, in accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 1 on agenda item 2), the Committee noted the decisions and outcomes of FAL 44 (MEPC 76/2), C 124 (MEPC 76/2/1), MSC 102 (MEPC 76/2/2), LC 42/LP 15 (MEPC 76/2/3) and TC 70 (MEPC 76/2/4) with regard to its work, and agreed to take action as appropriate under the relevant agenda items.

2.2 The outcome of MSC 103 relevant to the work of the Committee (MEPC 76/1/1/Add.1, paragraphs 12 to 15) was considered under the relevant agenda item 10, as it entailed decisions emanating from the outcomes of III 6 and SDC 7 (see section 10).

3 CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS

Amendments to mandatory instruments

3.1 The Committee considered this agenda item during the virtual meeting and was invited to consider and adopt proposed amendments to:

- .1 MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping and exemption of unmanned non-self-propelled (UNSP) barges from survey and certification requirements;
- .2 MARPOL Annex I concerning the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters;
- .3 MARPOL Annexes I and IV concerning the exemption of UNSP barges from survey and certification requirements; and
- .4 AFS Convention concerning controls on cybutryne and the form of the International Anti-fouling System Certificate (IAFSC);

and to approve the

- .5 draft guidelines for exemption of UNSP barges from the survey and certification requirements under the MARPOL Convention.

3.2 The Committee noted that the text of the aforementioned amendments to the mandatory instruments had been circulated, in accordance with articles 19(2)(a) of MARPOL and 16(2)(a) of the AFS Convention, to all IMO Members and Parties to MARPOL and the AFS Convention by Circular Letters No.4350 and No.4351 of 2 December 2020, respectively.

Draft amendments to MARPOL Annex VI

3.3 The Committee recalled that MEPC 75 had approved draft amendments to MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping and exemption of UNSP barges from survey and certification requirements, with a view to adoption at this session, with the understanding that this was a package together with the terms of reference for a comprehensive assessment of the possible impacts of the short-term measure on States. The draft amendments, which form part of a fully consolidated draft 2021 revised MARPOL Annex VI, are set in the annex to document MEPC 76/3, with a view to adoption.

3.4 The Committee agreed to consider proposals on further modifications to the draft amendments submitted under this agenda item and to instruct the virtual Drafting Group on Amendments to Mandatory Instruments to be established to start its work as soon as possible and that any decisions taken under agenda item 7 concerning the impact assessment, together with related commenting documents, would be duly referred to the virtual Drafting Group, as appropriate. The regulation numbers referred to below are those of annex 1 to document MEPC 76/3.

3.5 The Committee had for its consideration four documents commenting on the draft amendments, as follows: MEPC 76/3/5 (Estonia et al.), MEPC 76/3/6 (Brazil et al.), MEPC 76/3/8 (United States), and MEPC 76/3/9 (IMarEST).

3.6 The Committee considered document MEPC 76/3/5 (Estonia et al.), proposing an addition to the text of regulation 28.1 to permit exclusions for ice-classed ships when sailing in ice conditions.

3.7 Following discussion, the Committee did not agree to the proposal for an exclusion for ice-classed ships **in the draft amendments to MARPOL Annex VI** and decided that this matter should be considered as part of the ongoing discussion with regard to correction factors/voyage exclusions taking place in the Intersessional Working Group on Reduction of GHG Emissions from Ships, which should be addressed in the guidelines on the application of the CII that were to be developed.

3.8 The Committee considered documents MEPC 76/3/6 (Brazil et al.) and MEPC 76/3/8 (United States) together, as both proposed amendments to regulation 28.3, as well as the proposed text, prepared by the Chair together with the Secretariat, aimed at consolidating both proposals. The Committee noted that the Chair had proposed the following text for regulation 28.3:

"Notwithstanding paragraphs 1 and 2 of this regulation, in the event of any transfer of a ship addressed in regulations 27.4, 27.5 or 27.6 completed after 1 January 2023, a ship shall, after the end of the calendar year in which the transfer takes place, calculate and report the attained annual operational CII for the full 12-month period from 1 January to 31 December in the calendar year during which the transfer took place, in accordance with regulations 28.1 and 28.2, for verification in accordance with regulation 6.6 of this Annex, taking into account guidelines to be developed by the Organization. A ship shall not be assigned an operational carbon intensity rating for a partial year. Nothing in this regulation relieves any ship of their reporting obligations under regulation 27 or this regulation of this Annex."

3.9 Having considered the proposals, the Committee agreed in principle with the compromise text prepared by the Chair, recognizing however that there were still a number of elements that should be clarified to avoid any ambiguity in application.

3.10 The Committee noted the concerns raised by the observer from BIMCO with regard to particular cases that were not adequately covered by the proposed modifications to the text with respect to the calculation of the CII, notably for a new ship delivered after 1 January in a year; or a ship purchased at a judiciary sale, where no information followed the ship; or a ship where the Administration responsible for calculating the CII after 31 December did not verify the data submitted for the entirety of the previous year and did not receive a copy of that data at the time of transfer from the previous Administration.

3.11 While a number of delegations noted that these matters could not be fully resolved within the text of regulation 28.3 under consideration and instead would need to be clarified in more detail within the guidelines referred to in the same regulation which were to be developed, the Committee agreed that some further clarification to address the identified issues was required within the regulation itself. Consequently, the Committee agreed to refer the text, proposed by the Chair, together with the issues raised in plenary to the virtual Drafting Group to address as part of its work.

3.12 While noting that there was no clear agreement on the proposed consequential modifications set out in document MEPC 76/3/6, as a result of the further modifications to the text of regulation 28.3, the Committee also referred these to the virtual Drafting Group to address since these proposals were deemed to be editorial in nature.

3.13 The Committee agreed in general with the amendments to regulations 5, 6, 22, other parts of 28, and appendix X (Form of Statement of Compliance – Fuel Oil Consumption Reporting and Operational Carbon Intensity Rating) proposed in document MEPC 76/3/6 and referred them to the Drafting Group for further detailed consideration.

3.14 The Committee considered and agreed to the proposals set out in document MEPC 75/3/9 (IMarEST) suggesting a number of editorial modifications to harmonize the text of the consolidated draft 2021 revised MARPOL Annex VI. Having noted that these were purely editorial, the Committee referred the document to the virtual Drafting Group to consider in the preparation of the final text of the amendments.

3.15 The Committee, having considered two options for referencing the Code for recognized organizations (RO Code) under MARPOL Annex VI as a consequence of revoking of resolutions A.739(18) and A.789(19), as set out in paragraphs 6 and 7 of document MEPC 76/3, agreed to option 1: to replace the existing footnote or add a new footnote in regulations 5.3.1, 6.3, 6.5, 6.7, 22.1, 23.1 and 27.5 in the draft 2021 revised MARPOL Annex VI with the following text:

"Refer to the Code for Recognized Organizations (RO Code), as adopted by the Organization by resolution MEPC.237(65), as may be amended by the Organization"

3.16 Having decided on the aforementioned proposals, the Committee confirmed the contents of the requisite resolution and agreed that the deemed acceptance date would be 1 May 2022 and the date of entry into force of the amendments would be 1 November 2022.

3.17 Having decided on the respective modifications to the draft amendments, the Committee instructed the virtual Drafting Group to prepare the final text of the requisite MEPC resolution together with the amendments to MARPOL Annex VI, taking into account the decisions taken in plenary, for the Committee's consideration and adoption.

Draft amendments to MARPOL Annex I

3.18 The Committee recalled that MEPC 75 had approved draft amendments to MARPOL Annex I regarding the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters, with a view to adoption, as set out in the annex to document MEPC 76/3/1.

3.19 The Committee noted that one commenting document had been submitted, i.e. document MEPC 76/3/10 (FOEI et al.), related to this amendment, raising concerns with regard to provisions for exemptions and waivers set out in paragraphs 2 and 4 of the proposed amendment to regulation 43 of MARPOL Annex I and proposing that these be deleted from the text of the amendments to ensure adequate protection of the Arctic marine environment. The document further proposed that, should the waiver provision remain, such waivers only be issued in exceptional circumstances.

3.20 The Committee recalled that it had considered a similar proposal by FOEI et al. at MEPC 75 (MEPC 75/10/7) but had proceeded to approve the draft amendments to MARPOL Annex I, as contained in document MEPC 76/3/1, recognizing that they represented a delicate compromise which had been reached following careful consideration and negotiations at the PPR Sub-Committee, where the views and concerns of the many stakeholders affected by the amendments had been taken into account. Consequently, the Committee did not agree with the proposal in document MEPC 76/3/10.

3.21 Following discussion, the Committee confirmed the contents of the requisite resolution, agreed that the deemed acceptance date would be 1 May 2022 and the date of entry into force of the amendments would be 1 November 2022, and instructed the virtual Drafting Group to prepare the final text of the requisite MEPC resolution together with the amendments to MARPOL Annex I, based on the text of the amendments contained in document MEPC 76/3/1.

Draft amendments to MARPOL Annexes I and IV

3.22 The Committee recalled that MEPC 75 had approved draft amendments to MARPOL Annexes I and IV concerning the exemption of UNSP barges from survey and certification requirements, as set out in the annex to document MEPC 76/3/2.

3.23 The Committee confirmed the contents of the requisite resolution, agreed that the deemed acceptance date would be 1 May 2022 and the date of entry into force of the amendments of 1 November 2022, and instructed the virtual Drafting Group to prepare the final text of the requisite MEPC resolution together with the amendments to MARPOL Annexes I and IV.

Draft amendments to the AFS Convention

3.24 The Committee recalled that MEPC 75 had approved draft amendments to the AFS Convention concerning controls on cybutryne and the form of the IAFSC, with a view to adoption at this session, as set out in the annex to document MEPC 76/3/3.

3.25 The Committee, having considered the proposal contained in the commenting document submitted by China et al. (MEPC 76/3/7) for the addition of a new column to the table set out in appendix 1 to Annex 4 of the Convention, agreed that it provided additional clarity in the form for those ships that had applied an anti-fouling system containing cybutryne previously, but where such a system was not currently contained in the external coating layer of their hulls or external parts or surfaces.

3.26 The Committee, having considered the proposals in document MEPC 76/3/3 concerning the reference to the RO Code under the AFS Convention, and, in line with its decision with respect to referencing the RO Code in MARPOL Annex VI (see paragraph 3.15), agreed to replace the existing footnote in regulation 1(4)(b) by the following:

"Refer to the Code for Recognized Organizations (RO Code), as adopted by the Organization by resolution MEPC.237(65), as may be amended by the Organization".

3.27 Having decided on the proposals, the Committee confirmed the contents of the requisite resolution and agreed that the deemed acceptance date would be 1 July 2022 and date of entry into force of the amendments would be 1 January 2023.

3.28 The Committee instructed the virtual Drafting Group to prepare the final text of the requisite MEPC resolution, together with the amendments to the AFS Convention for the Committee's consideration and adoption.

Establishment of the virtual Drafting Group on Amendments to Mandatory Instruments

3.29 The Committee established the virtual Drafting Group on Amendments to Mandatory Instruments and instructed it, taking into account comments, proposals and decisions made in plenary, to prepare:

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- .1 the final text of the draft amendments to MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping and exemption of UNSP barges from survey and certification requirements in the form of a revised consolidated MARPOL Annex VI;
 - .2 the final text of the draft amendments to MARPOL Annex I concerning the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters;
 - .3 the final text of the draft amendments to MARPOL Annexes I and IV concerning the exemption of UNSP barges from survey and certification requirements;
 - .4 the final text of the draft amendments to the AFS Convention concerning controls on cybutryne and the form of the IAFSC; and
 - .5 the final text of the draft MEPC circular on the guidelines for exemption of UNSP barges from the survey and certification requirements under the MARPOL Convention.

Report of the virtual Drafting Group

3.30 Having considered the report of the virtual Drafting Group (MEPC 76/WP.5 and MEPC 76/WP.5/Add.1), the Committee approved it in general and took action as indicated below.

Amendments to MARPOL Annex VI

3.31 In considering the final text of the draft amendments to MARPOL Annex VI, as prepared by the Drafting Group, the Committee:

- .1 noted the Group's revision of the text of regulation 28.3 and the associated footnote, based on the draft prepared by the Chair and referred to the Group (see paragraph 3.8);
- .2 noted the Group's revisions to the text of regulations 6.6 to 6.8 related to the Statement of Compliance, and regulation 26 related to the SEEMP, to bring these in line with the agreed changes to regulation 28.3;
- .3 agreed to the Group's proposed new paragraph 11 in regulation 27, which was aimed at addressing the need to grant access to an Administration of a ship to which regulation 28 applied, to all reported data for the previous calendar year for the purposes of the CII calculation;
- .4 noted that the Group was unable to address the matter related to the transfer of a company during the year as part of its work and agreed that this matter be added to the terms of reference of the Correspondence Group on Carbon Intensity Reduction for its consideration in the context of developing appropriate guidance on the CII calculation in the case of a transfer of Administration or company;
- .5 having noted that appendix IX had a provision for including EEDI information on the form, but that there was no similar provision for the inclusion of EEXI information, invited interested Member States and international organizations to consider the need for a future amendment;

- .6 in view of the significant renumbering of regulations and paragraphs in the amendments to MARPOL Annex VI, requested the Secretariat to consider the publication of a revised consolidated MARPOL Annex VI, including cross-referencing tables to the previous version; and
- .7 agreed to the revised text on the requisite resolution for the adoption of the revised MARPOL Annex VI, as set out in the annex to document MEPC 76/WP.5/Add.1.

3.32 The Committee adopted resolution MEPC.328(76) on amendments to MARPOL Annex VI concerning mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping and exemption of UNSP barges from survey and certification requirements, as part of the fully consolidated 2021 revised MARPOL Annex VI, as set out in annex 1.

3.33 In adopting resolution MEPC.328(76), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex VI shall be deemed to have been accepted on 1 May 2022 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 November 2022, in accordance with article 16(2)(g)(ii) of the Convention.

3.34 As requested, the text of the statement made by the delegation of Portugal is set out in annex 20.

Amendments to MARPOL Annex I

3.35 The Committee considered the final text of the draft amendments to MARPOL Annex I regarding the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters, and adopted the amendments by resolution MEPC.329 (76), as set out in annex 2.

3.36 In adopting resolution MEPC.329(76), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex I shall be deemed to have been accepted on 1 May 2022 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 November 2022, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to MARPOL Annexes I and IV

3.37 The Committee considered the final text of the draft amendments to MARPOL Annexes I and IV concerning the exemption of UNSP barges from certain survey and certification requirements, as prepared by the virtual Drafting Group.

3.38 In this context, the Committee noted an intervention by the delegation of the Marshall Islands who, in referring to the amendments to regulation 7.4 of MARPOL Annex VI, which provided that UNSP Exemption Certificate shall not be issued to a ship which was entitled to fly the flag of a State which was not a Party, suggested that same amendments should be made to regulation 8.4 of MARPOL Annex I and regulation 6.4 of MARPOL Annex IV for the reason of consistency.

3.39 The Committee agreed to the proposal by the delegation of the Marshall Islands and instructed the Secretariat to effect those amendments when preparing the final text of the amendments.

3.40 Subsequently, the Committee adopted resolution MEPC.330(76) on amendments to MARPOL Annexes I and IV concerning the exemption of UNSP barges from certain survey and certification requirements, as set out in annex 3.

3.41 In adopting resolution MEPC.330(76), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annexes I and IV shall be deemed to have been accepted on 1 May 2022 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 November 2022, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to the AFS Convention

3.42 The Committee considered the final text of the draft amendments to the AFS Convention concerning controls on cybutryne and the form of the IAFSC, and adopted the amendments by resolution MEPC.331(76), as set out in annex 4.

3.43 In adopting resolution MEPC.331 (76), the Committee determined, in accordance with article 16(2)(e)(ii) of the AFS Convention, that the adopted amendments shall be deemed to have been accepted on 1 July 2022 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(e)(ii) of the Convention) and shall enter into force on 1 January 2023, in accordance with article 16(2)(f)(ii) of the Convention.

Guidelines for exemption of UNSP barges from certain survey and certification requirements under the MARPOL Convention

3.44 The Committee approved the final text of the *Guidelines for exemption of UNSP barges from certain survey and certification requirements under the MARPOL Convention* and instructed the Secretariat to disseminate the guidelines as MEPC.1/Circ.892.

3.45 In this connection, the Committee noted the view of the virtual Drafting Group that the above-mentioned guidelines did not provide guidance on where the exemption certificates should be located when a UNSP barge was not being either pushed or towed.

Instructions to the Secretariat

3.46 In adopting the aforementioned amendments, the Committee authorized the Secretariat, when preparing the authentic texts, to make any editorial corrections that might be identified as appropriate, including updating references to renumbered paragraphs, and to bring to the attention of the Committee any errors or omissions requiring action by the Parties to MARPOL and the AFS Convention.

4 HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

4.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 2 on agenda item 4), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 76/4/1 (ISO), providing an update on standardization work for a verification testing protocol for compliance monitoring devices;
- .2 MEPC 76/4/3 (Secretariat), providing an update on the experience-building phase associated with the Ballast Water Management Convention;
- .3 MEPC 76/INF.3 (Viet Nam), providing information on the type approval of the Alfa Laval PureBallast 3.2 ballast water management system;
- 4 MEPC 76/INF.4 (Viet Nam), providing information on the type approval of the Thao Linh Development Maritime Technology Co. Ltd. Ballast Water Management System;
- .5 MEPC 76/INF.6 (United Kingdom), providing information on the type approval of the De Nora Marine Technologies, LLC BALPURE® Ballast Water Management System;
- .6 MEPC 76/INF.13 (Norway), providing information on the type approval of the BWMS inTank BWTS;
- .7 MEPC 76/INF.14 (Norway), providing information on the type approval of the BWMS oneTank;
- .8 MEPC 76/INF.15 (Norway), providing information on the type approval of the Optimarin Ballast System;
- .9 MEPC 76/INF.18 (Norway), providing information on the type approval of the Wärtsilä Aquarius UV BWMS;
- .10 MEPC 76/INF.19 (France), providing information on the type approval of the BIO-SEA® Ballast Water Treatment System manufactured by BIO-UV Group;
- .11 MEPC 76/INF.20 (INTERTANKO), providing comments on entries in the ballast water record book;
- .12 MEPC 76/INF.26 (Singapore), providing information on the type approval of the Semb-Eco ballast water management system;
- .13 MEPC 76/INF.34 (Japan), providing information on the type approval of the Miura BWMS ballast water management system manufactured by MIURA CO., LTD.;
- .14 MEPC 76/INF.35 (Japan), providing information on the type approval of the Miura BWMS ballast water management system manufactured by MIURA CO., LTD.;
- .15 MEPC 76/INF.36 (Japan), providing information on the type approval of the Miura BWMS ballast water management system manufactured by MIURA CO., LTD.;
- .16 MEPC 76/INF.37 (Japan), providing information on the type approval of the JFE BallastAce ballast water management system manufactured by JFE Engineering Corporation;

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- .17 MEPC 76/INF.46 (China), providing an introduction on a rapid detailed method for assessing the viability of 10-50 µm phytoplankton in ballast water;
 - .18 MEPC 76/INF.47 (Norway), providing information on the type approval of the ECS HYCHLOR™ ballast water management system;
 - .19 MEPC 76/INF.48 (Norway), providing information on the type approval of the Ecochlor® ballast water management system;
 - .20 MEPC 76/INF.49 (Norway), providing information on the type approval of the Wärtsilä Aquarius EC ballast water management system;
 - .21 MEPC 76/INF.50 (Norway), providing information on the type approval of the ATPS BLUEsys ballast water management system;
 - .22 MEPC 76/INF.51 (Norway), providing information on the type approval of the SKF BlueSonic ballast water management system;
 - .23 MEPC 76/INF.52 (Norway), providing information on the type approval of the Seascope ballast water management system;
 - .24 MEPC 76/INF.53 (Norway), providing information on the type approval of the NGT ballast water management system;
 - .25 MEPC 76/INF.54 (Norway), providing information on the type approval of the KURITA ballast water management system;
 - .26 MEPC 76/INF.55 (Norway), providing information on the type approval of the Trojan Marinex BWT™ ballast water management system;
 - .27 MEPC 76/INF.56 (Australia), containing the findings from a study evaluating the performance of ballast water management systems installed on board ships against the D-2 performance standard of the Ballast Water Management Convention;
 - .28 MEPC 76/INF.57 (China), providing information on the type approval of the PACT marine Ballast Water Management System;
 - .29 MEPC 76/INF.58 (China), providing information on the type approval of the LeesGreen® Ballast Water Management System;
 - .30 MEPC 76/INF.59 (China), providing information on the type approval of the Cyeco Ballast Water Management System;
 - .31 MEPC 76/INF.62 (Norway), providing information on the type approval of the KBAL BWMS ballast water management system;
 - .32 MEPC 76/INF.66 (China), providing information on the type approval of the BSKY™ Ballast Water Management System; and
 - .33 MEPC 75/3/5 (China), deferred from MEPC 75, providing comments on the draft amendments to the BWM Convention with regard to the form of the International Ballast Water Management Certificate.

4.2 During the virtual meeting, the Committee reconfirmed the endorsement of the Chair's proposals in annex 2 to document MEPC 76/1/1, as set out in the following paragraphs 4.3 to 4.7.

Verification of compliance monitoring devices

4.3 The Committee instructed the PPR Sub-Committee to consider document MEPC 76/4/1 (ISO), in the context of the consideration of a protocol for the verification of compliance monitoring devices (CMDs) under agenda item 19 (Any other business), and to advise the Committee accordingly.

Experience-building phase

4.4 The Committee noted the information provided in document MEPC 76/4/3 (Secretariat) and encouraged Administrations wishing to submit data to the experience-building phase (EBP), as well as other stakeholders with potential complementary data, to liaise with the World Maritime University (WMU) at ebp21@wmu.se to facilitate data submission and gathering.

Form of the International Ballast Water Management Certificate

4.5 The Committee instructed the PPR Sub-Committee to consider document MEPC 75/3/5 (China), under agenda item 16 (Unified interpretation to provisions of IMO environment-related conventions), and to advise the Committee accordingly.

Type approval of ballast water management systems

4.6 The Committee noted the information regarding type-approved ballast water management systems provided in documents MEPC 76/INF.3 and MEPC 76/INF.4 (Viet Nam), MEPC 76/INF.6 (United Kingdom), MEPC 76/INF.13, MEPC 76/INF.14, MEPC 76/INF.15 and MEPC 76/INF.18 (Norway), MEPC 76/INF.19 (France), MEPC 76/INF.26 (Singapore), MEPC 76/INF.34, MEPC 76/INF.35, MEPC 76/INF.36 and MEPC 76/INF.37 (Japan), MEPC 76/INF.47, MEPC 76/INF.48, MEPC 76/INF.49, MEPC 76/INF.50, MEPC 76/INF.51, MEPC 76/INF.52, MEPC 76/INF.53, MEPC 76/INF.54 and MEPC 76/INF.55 (Norway), MEPC 76/INF.57, MEPC 76/INF.58 and MEPC 76/INF.59 (China), MEPC 76/INF.62 (Norway) and MEPC 76/INF.66 (China).

Information on other matters related to the implementation of the BWM Convention

4.7 The Committee noted the information contained in documents MEPC 76/INF.20 (INTERTANKO) on entries in the ballast water record book, MEPC 76/INF.46 (China) on a rapid detailed method for assessing the viability of 10-50 µm phytoplankton in ballast water, and MEPC 76/INF.56 (Australia) on a study evaluating the performance of ballast water management systems installed on board ships against the D-2 standard.

MATTERS DEFERRED TO MEPC 77

Application of the BWM Convention to specific ship types

4.8 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of documents MEPC 75/4/7 (Australia et al.), MEPC 75/4/8 (Russian Federation), MEPC 74/4/13 (Russian Federation), and MEPC 74/4/18, MEPC 74/4/19 and MEPC 74/4/20 (Turkey) to MEPC 77.

Application of the BWM Convention to ships operating at ports with challenging water quality

4.9 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of documents MEPC 76/4 and Corr.1 (Liberia), MEPC 76/4/4 (China), MEPC 76/4/5 (Republic of Korea), 76/4/6 (Norway), MEPC 76/4/7 (INTERTANKO) and MEPC 76/4/8 (Marshall Islands) to MEPC 77.

Review of the ballast water record book

4.10 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of document 76/4/2 (Liberia et al.) to MEPC 77.

5 AIR POLLUTION PREVENTION

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

5.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 3 on agenda item 5), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 76/5/2 (Secretariat), providing the summary of information reported to IMO related to the implementation of the global 0.50% sulphur limit from 1 January 2020 (IMO2020) and presenting the outcomes of the sulphur monitoring programme for 2020;
- .2 MEPC 76/INF.64 (ICOMIA), providing an update on the availability of Tier III NO_x compliant engines for large yachts greater than 24 m load-line length and less than 500 gross tonnes; and
- .3 MEPC 76/INF.71 (Tokyo MOU), providing summarized information on the results of inspections by port State control (PSC) related to the global 0.50% sulphur limit (IMO2020) requirements, conducted by Tokyo MOU member Authorities.

5.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 2 to document MEPC 76/1/1, as set out in the following paragraphs 5.3 to 5.5.

IMO monitoring programme of the worldwide average sulphur content of fuel oils supplied

5.3 The Committee noted the relevant information provided in document MEPC 76/5/2 (Secretariat) related to the implementation of IMO 2020 as well as the outcome of the monitoring of the worldwide average sulphur content of residual and distillate fuel oils supplied for use on board ships through 2020.

5.4 The Committee noted the information in document MEPC 76/INF.71 (Tokyo MOU) providing the summary of information on port State control (PSC) of the 2020 sulphur limit (IMO 2020) requirements conducted by Tokyo MOU member Authorities.

MARPOL Annex VI NO_x Tier III requirements for large yachts

5.5 The Committee noted the information in document MEPC 76/INF.64 (ICOMIA) providing an update on the availability of Tier III NO_x compliant engines for large yachts greater than 24 m load-line length and less than 500 gross tonnage.

MATTERS CONSIDERED DURING THE VIRTUAL MEETING

5.6 The Committee recalled that, as indicated in paragraph 11.3 and annex 1 of document MEPC 76/1/1, under agenda items 5 and 6, the Chair had proposed to focus on the report of the Correspondence Group on Air Pollution and Energy Efficiency, which was established by MEPC 75 (MEPC 75/18, paragraphs 5.13 and 5.14) and the report by the Secretariat on the fuel oil consumption data submitted to the IMO Ship Fuel Oil Consumption Database in GISIS.

Report of the Correspondence Group on Air Pollution and Energy Efficiency

5.7 Having noted the discussion of the Correspondence Group on Air Pollution and Energy Efficiency, as summarized in document MEPC 76/5/1, the Committee considered the actions requested of it in paragraph 49 of the report of the Correspondence Group and took action as outlined in the following paragraphs 5.8 to 5.24.

Licence for fuel oil supply

5.8 During the consideration of the proposed amendments to the *Guidance for best practice for Member State/coastal State* (MEPC.1/Circ.884) set out in annex 1 to document MEPC 76/5/1, the observer from IBIA, supported by the delegation of the United States, proposed that the word "should" in paragraph 4.3.2 of the draft guidance be replaced by "could" or "may" to more clearly indicate that the bunker licence set out in the appendix to the draft guidance was an indicative example and that it was at the discretion of Member States or other relevant authorities to adapt should they choose to do so.

5.9 The Committee, having recognized that the word "should" in paragraph 4.3.2 of the draft guidance should not be construed as prescriptive, agreed not to change "should" to "could". The Committee approved the proposed amendments to the *Guidance for best practice for Member State/coastal State* (MEPC.1/Circ.884) set out in annex 1 to document MEPC 76/5/1, and instructed the Secretariat to revise MEPC.1/Circ.884 accordingly for dissemination as circular MEPC.1/Circ.884/Rev.1.

Proxy for offshore and marine contracting vessels and cruise passenger ships.

5.10 With regard to the way forward for determining proxies of offshore and marine contracting vessels and cruise passenger ships, the Committee had for its consideration:

- .1 the proposal by the Correspondence Group, as described in paragraphs 16 and 21 of document MEPC 76/5/1; and
- .2 document MEPC 76/5/3 (IMCA), expressing concerns that voluntary submission of data for offshore and marine contracting vessels might lead to inadequate quality control and proposing instead that industry organizations, like IMCA, could submit data to IMO on behalf of its members on an annual basis during the stage of data collection before one proxy was selected to assess the suitability of the proxies.

5.11 The Committee agreed in principle to the way forward for determining proxies for offshore and marine contracting vessels and cruise passenger ships, as proposed by the Correspondence Group in paragraphs 16 and 21 of document MEPC 76/5/1, while noting the proposals in document MEPC 76/5/3 (IMCA), namely:

- .1 that the reporting to the Organization via email should be preferably done via Member States and relevant industry organizations; and
- .2 for offshore and marine contracting vessels, to collect "total yearly running hours on all engines" and "total installed rated power from all engines in kW" in addition to the IMO DCS data, if applicable, for trial on a voluntary basis.

5.12 The Committee noted an intervention by the observer from IMCA referring to documents MEPC 74/6 and MEPC 74/INF.35 (the Russian Federation and IMCA), advising that they had already collected data regarding the two proxies for offshore and marine contracting vessels on behalf of its members, which they were invited to share with the Secretariat.

5.13 Having noted that there was overlapping work with agenda item 7 with regard to the submission of additional parameters by ships for voluntary CII reporting as had been discussed during ISWG-GHG 8, the Committee agreed to forward the above-mentioned proposals to the Correspondence Group on Carbon Intensity Reduction, which was established at this session under agenda item 7, with a view to developing possible parameters and templates for reporting, verification and submission of data for trial CIIs of individual ships on a voluntary basis, including trial proxies for offshore and marine contracting vessels and cruise passenger ships, taking into account documents MEPC 76/5/1 and MEPC 76/5/3.

Performance indicators

5.14 The Committee concurred with the view of the Correspondence Group that all potential performance indicators (PIs), as set out in annex 3 to document MEPC 76/5/1, should be kept for further consideration, and noted that some of the PIs proposed by the Correspondence Group could not be obtained from the data currently collected pursuant to regulation 27 of MARPOL Annex VI.

Shaft/Engine Power Limitation concept

5.15 The Committee approved the work plan to progress the work on the Shaft/Engine Power Limitation concept, as set out in annex 4 to document MEPC 76/5/1.

5.16 In this context, the Committee noted the preliminary consideration on the possible items to be covered by the possible "guidelines on the Shaft/Engine Power Limitation System to comply with the EEDI requirements", as tentatively summarized in paragraph 29 of document MEPC 76/5/1, and the need to continue consideration on substantial content of the aforementioned possible guidelines.

Revision of the interim minimum power guidelines

5.17 The Committee considered the draft amendments to the *2013 Interim guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions* (MEPC.1/Circ.850/Rev.2), as prepared by the Correspondence Group and set out in annex 5 to document MEPC 76/5/1, in conjunction with document MEPC 76/5/4 (Republic of Korea) commenting on the Correspondence Group's discussion on ship forward speed and proposing that the forward speed provided in the draft revised guidelines be further considered

with a conservative approach, such as 4.0 knots, taking into account the comparison between the required propulsion power across under the existing simplified assessment (existing assessment level 2) and under the proposed new minimum power assessment (new assessment level 2) presented in document MEPC 76/5/4.

5.18 The Committee noted an intervention by the delegation of the Republic of Korea, supported by the observer from INTERCARGO referring to document MEPC 76/5/4, expressing their concern in respect of safety of ships under the revised guidelines as their calculations showed that the revised guidelines would require less minimum propulsion power compared to under the existing interim guidelines, and expressed the view that further consideration was needed to finalize the revised guidelines at a future session.

5.19 In this regard the Committee also noted an intervention by the delegation of Japan, supporting the revised guidelines as developed by the Correspondence Group, and stating that the analysis shown in document MEPC 76/5/4 was inappropriate as it was not only the required minimum propulsion power that should be compared but also other technical considerations needed to be considered, such as measuring the manoeuvrability of a ship. The Committee also noted that the ship forward speed had been discussed in the Correspondence Group and no technical justification in terms of negative impact on safety of navigation had been submitted.

5.20 Following consideration, and having taken into account the urgency to complete the work on the revised Guidelines, the Committee approved the amendments to the *2013 Interim guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions* (MEPC.1/Circ.850/Rev.2), including the change of title to "Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions", as prepared by the Correspondence Group (MEPC 76/6/1, annex 5) without modification, and instructed the Secretariat to revise MEPC.1/Circ.850/Rev.2 accordingly, for dissemination as circular MEPC.1/Circ.850/Rev.3.

5.21 The Committee also agreed to keep the Guidelines under review and invited Member States and international organizations to report on the experiences gained in the implementation of the Guidelines, including further consideration of forward ship speed, as proposed in document MEPC 76/5/4 (Republic of Korea), to a future session of the Committee.

Amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships

5.22 The Committee adopted resolution MEPC.332(76) on *Amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.308(73), as amended by resolution MEPC.322(74)), as set out in annex 5.

Amendment to unified interpretation on the dates related to EEDI Phase 2 and 3 for new ships

5.23 The Committee approved the updated unified interpretation clarifying the dates related to EEDI Phase 2 and 3 for "new ships" following the entry into force of the amendments on the early application of EEDI Phase 3 for certain ship types as set out in table 1 of regulation 21 of MARPOL Annex VI (resolution MEPC.324(75)), as set out in annex 6, and instructed the Secretariat to revise MEPC.1/Circ.795/Rev.4 accordingly, for dissemination as MEPC.1/Circ.795/Rev.5.

Clarification of criteria of ship types subject to "Attained EEDI" and "Required EEDI"

5.24 The Committee noted that the Correspondence Group, having taken into account document MEPC 74/5/14 (Republic of Korea), had not identified a specific need to clarify the ship types that were subject to the provisions for "Attained EEDI" and "Required EEDI" in accordance with chapter 4 of MARPOL Annex VI.

MATTERS DEFERRED TO MEPC 77

5.25 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of documents MEPC 76/5/5 (Austria et al.), MEPC 75/5 (Secretariat), MEPC 75/5/Add.1 (Secretariat), MEPC 75/5/1 (Secretariat), MEPC 75/5/3 (Republic of Korea), MEPC 75/INF.4 (Secretariat) and MEPC 75/INF.9 (Secretariat) to MEPC 77.

6 ENERGY EFFICIENCY OF SHIPS**Matters considered by correspondence prior to the virtual meeting**

6.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 4 on agenda item 6), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 76/6/4 (IACS and ASEF), introducing the background information on issuing the "2020 industry guidelines for calculation and verification of the Energy Efficiency Design Index (EEDI)", a copy of which is set out in the annex to document MEPC 76/INF.28, including the explanation on changes from the 2015 industry guidelines;
- .2 MEPC 76/INF.2 (Secretariat), providing the ninth summary of data and graphical representations of the information in the EEDI database;
- .3 MEPC 76/INF.28 (IACS and ASEF), containing, in the annex, a copy of the 2020 industry guidelines for calculation and verification of the Energy Efficiency Design Index (EEDI); and
- .4 MEPC 76/INF.40 (Republic of Korea), providing information developed by a joint research group of the Republic of Korea with a view to completing the *Interim guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition for trial use*.

6.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 2 to document MEPC 76/1/1, as set out in the following paragraphs 6.3 to 6.5.

Industry guidelines on calculation and verification of EEDI

6.3 The Committee noted the 2020 industry guidelines on calculation and verification of Energy Efficiency Design Index (EEDI) set out and discussed in documents MEPC 76/6/4 and MEPC 76/INF.28 (IACS and ASEF).

Status of technological development of the EEDI database

6.4 The Committee noted the information in document MEPC 76/INF.2 (Secretariat) providing the ninth summary of data and graphical representations of the information in the EEDI database.

Calculation of the coefficients f_w

6.5 The Committee noted the information in document MEPC 76/INF.40 (Republic of Korea) provided with a view to completing the *Interim guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition for trial use (MEPC.1/Circ.796)*.

Matters considered during the virtual meeting

Report of fuel oil consumption data submitted to the IMO Ship Fuel Oil Consumption Database in GISIS

6.6 The Committee recalled that amendments to MARPOL Annex VI for the data collection system for fuel oil consumption of ships entered into force on 1 March 2018 and that, in accordance with regulation 27.10 of MARPOL Annex VI, the Secretary-General of the Organization shall produce an annual report to the Committee.

6.7 The Committee also recalled that the *2017 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database* (resolution MEPC.293(71)), which described the information to be included in the report, had been adopted at MEPC 71.

6.8 In this regard the Committee considered document MEPC 76/6/1 (Secretariat) providing the report of the fuel oil consumption data for the period from 1 January 2019 until 31 December 2019, and noted in particular that:

- .1 in January 2019, the Secretariat had estimated that 32,511 ships, under 135 Administrations, could potentially fall under the scope of regulation 27 of MARPOL Annex VI;
- .2 data for reporting year 2019 were submitted by 107 Administrations, consisting of 72 Parties to MARPOL Annex VI and 35 non-Parties, for 27,221 ships in total out of a potential 32,511 (83.7%) and that, on the basis of gross tonnage, the reported data represented 93.0% of the ships that were estimated to fall under the scope of regulation 27 of MARPOL Annex VI;
- .3 just over 213 million tonnes of fuel were used in 2019 in total on a quantity basis: 80.5% of the fuel oil used during 2019 was heavy fuel oil (HFO), and 11.3% was diesel/gas oil (MDO/MGO) and 3.3% was light fuel oil (LFO), meaning that more than 95% of the fuel oil used during 2019 was conventional fuel oil; and
- .4 the majority of fuel oil was consumed by three ship types: bulk carriers, tankers, containerships; in addition, 10 million tonnes (4.9%) of liquefied natural gas (LNG), mainly used by gas carriers and LNG carriers, was reported; and the remaining minority fuel oil types reported were ethanol, methanol, LPG and biofuel.

6.9 The Committee also noted that, following the analysis and verification of the 2019 fuel consumption data, the Secretariat had proposed a number of improvements to the reporting process and the Ship Fuel Oil Consumption module in GISIS as set out in paragraph 21 of document MEPC 76/6/1, inter alia:

- .1 updating the hourly limit when inputting "hours under way" in GISIS;
- .2 including further instructions for Administrations and recognized organizations to ensure reporting in the appropriate ship type category;
- .3 considering amending the *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.308(73)) to include ethane and biofuel; and
- .4 with regard to reporting biofuels under the "Other" category, user defined CF values should be calculated based on their chemical properties and CO₂ emissions in operation to allow for comparisons with the CF values defined in resolution MEPC.308(73).

6.10 Subsequently, the Committee instructed the Secretariat to continue to maintain the Ship Fuel Oil Consumption module in GISIS and authorized the Secretariat to proceed with implementing improvements to the reporting process and the module in GISIS.

6.11 The Committee noted the confirmation by the observer from IACS that document MEPC 76/6/9 (IACS) on using ethane as fuel, deferred to MEPC 77, was directly relevant to the consideration in paragraph 21.3 of document MEPC 76/6/1 (Secretariat) regarding amending the *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.308(73)), to include ethane and biofuel. In respect of biofuel, the observer from IACS informed the Committee that IACS had initiated work on this and would share the results with the Committee upon its conclusion.

Matters deferred to MEPC 77

6.12 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of documents MEPC 76/6 (Japan), MEPC 76/6/2 (China, Germany and Japan), MEPC 76/6/3 (China), MEPC 76/6/5 (CESA), MEPC 76/6/6 (Finland and Germany), MEPC 76/6/7 (France), MEPC 76/6/8 (France), MEPC 76/6/9 (IACS), MEPC 76/6/10 (Comoros and RINA), MEPC 76/INF.27 (Japan), MEPC 75/6/4 (INTERTANKO), MEPC 74/5 (IACS), MEPC 74/5/6 (ICS, ITF and ASEF), MEPC 74/5/7 (Secretariat), MEPC 74/5/30 (China) and MEPC 74/INF.39 (China) to MEPC 77.

7 REDUCTION OF GHG EMISSIONS FROM SHIPS

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

7.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 5 on agenda item 7), the Committee noted document MEPC 76/INF.25 (Secretariat) informing the Committee of the recently finalized Ship-Port Interface Guide – Practical Measures to Reduce GHG Emissions, which was developed by the Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA) within the framework of the IMO-Norway GreenVoyage2050 Project.

MATTERS CONSIDERED DURING THE VIRTUAL MEETING

7.2 The Committee agreed to consider matters under this agenda item in the following order:

- .1 the report of the Steering Committee on the Comprehensive Impact Assessment of the short-term measure approved by MEPC 75;
- .2 the outcome of the eighth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 8);
- .3 the revised proposal on the establishment of the International Maritime Research and Development Board and the IMO Maritime Research Fund and related commenting documents; and
- .4 proposals on the development of mid- and long-term measures following up on the Initial IMO GHG Strategy and supporting working arrangements.

Report of the Steering Committee on the Comprehensive Impact Assessment of the short-term measure approved by MEPC 75

7.3 The Committee recalled that MEPC 75 had approved the terms of reference and arrangements for conducting a comprehensive impact assessment of the short-term measure and had instructed the Secretariat to initiate the impact assessment in accordance with the approved terms of reference, with a view to the submission of a final report for the consideration of MEPC 76.

7.4 In this regard the Committee noted documents MEPC 76/7 and MEPC 76/7/Add.1 (Secretariat) providing updates on the preparation of the comprehensive impact assessment and the outcomes of the meetings of the established Steering Committee on the comprehensive impact assessment. The Committee noted, in particular, that the Steering Committee had agreed to structure its work under the terms of reference in seven distinct but closely interlinked tasks: literature review; assessment of the impact of the measure on the fleet; assessment of the impact of the measure on States; stakeholder analysis; identification of areas of missing data; COVID-19 considerations; and disproportionately negative impacts.

7.5 The Committee considered documents MEPC 76/7/13 and MEPC 76/INF.68 and addenda (Secretariat) containing the main findings of the impact assessment as well as the detailed outcomes of each of the tasks carried out under the impact assessment. The coordinator of the Steering Committee, Mr. Harry Conway (Liberia), introduced in particular the following points:

- .1 the assessment of the impacts on States expressed in changes in GDP and trade values (imports/exports), as conducted by UNCTAD (task 3), demonstrated that by 2030, while overall the global impacts of the short-term measure would be relatively small (GDP reduction at the global level in the range of -0.04% on average in the High-GHG reduction scenario and -0.02% under the Low-GHG reduction scenario), there would be relatively higher negative impacts of the short-term measure on certain groups of States, in particular those developing countries remote from their main export markets, including LDCs and SIDS;

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- .2 generally, the negative impacts would be higher for countries that already had a weakened economy (including possibly by the impact of COVID-19) while, at the same time, the impacts of the draft amendments would not be larger than already existing fluctuations in global freight rates following from, for instance, fuel price fluctuations or other economic developments;
 - .3 for some countries the negative impacts of the IMO measure assessed in this report were higher than for others, and aware of the resource constraints of some developing countries, including SIDS and LDCs, some countries would likely require support to mitigate the increased maritime logistics costs and alleviate the consequent negative impact on their respective real income and trade flows; and
 - .4 whereas the impact assessment identified negative impacts, the Steering Committee did not make any progress on defining whether those negative impacts were to be considered as "disproportionately" negative.

7.6 The Committee further had for its consideration the following three documents commenting on the main findings of the impact assessment as set out in document MEPC 76/7/13, namely documents:

- .1 MEPC 76/7/62 (Solomon Islands) noting that the needs of SIDS and LDCs were not homogeneous; and proposing that no general exemptions or waivers be adopted at this point of time, but that three years after entry into force of the short-term measure a review should be performed to identify whether there would be any disproportionately negative impacts on States, in particular SIDS and LDCs, and also suggesting that during that period, specific studies should be undertaken on the transport costs and economics of shipping for SIDS and LDCs to ensure that the needs of developing countries, particularly SIDS and LDCs would be appropriately addressed;
- .2 MEPC 76/7/63 (Antigua and Barbuda et al.) proposing, in light of the number of negative impacts identified in the impact assessment, which in the view of the co-sponsors could create serious problems for many developing countries, particularly SIDS and LDCs, the inclusion of a waiver clause in the draft amendments to MARPOL Annex VI for, in particular, LDCs and SIDS that were likely to be negatively impacted by the measure, on the basis of specific criteria and the individual waivers to be approved by the Committee; and
- .3 MEPC 76/7/64 (Argentina et al.) proposing that the draft resolution for the adoption of the short-term measure should also include some decisions inspired by the conclusions of the comprehensive impact assessment and complementary assessments, including the proposal to work on a mechanism to address impacts on States, and to invite for proposals to ISWG-GHG 10 to follow-up on those decisions.

7.7 The Committee noted document MEPC 76/INF.61 (Brazil) providing an analysis of the impact of the reduction in ship speed and power on the Brazilian economy, although in relation to the 2050 level of ambition set out in the Initial Strategy and not the 2030 level of ambition.

7.8 In the ensuing discussion, many delegations supported the approval of the report on the comprehensive impact assessment and stated that it constituted a high-quality impartial study that also allowed for the participation of relevant stakeholders, which would enable the

Organization to take informed decisions. Several other delegations, in acknowledging the work done, noted that a number of uncertainties remained, that several assumptions on costs and enforcement of the measure would need to be validated and that the cost models used tended to overestimate negative impacts on States. Some of these delegations also expressed the view that future impact assessments should assess not only negative impacts but also positive impacts.

7.9 In referring to the findings of the comprehensive impact assessment, some delegations highlighted that the impact assessment showed that some countries were likely to be negatively impacted, that forced speed reduction would require additional ships to compensate for the transport capacity loss, that small ships engaged in short-sea shipping were likely to face difficulties, and that there was a need to reassess GHG reduction targets taking into account the effects of the COVID-19 pandemic. Some other delegations highlighted that the global impact on GDP and trade could be considered small when compared to other normal fluctuations and that, even with the measure in place, the cost intensity of shipping was expected to decrease by 2030 compared to 2019.

7.10 Some delegations highlighted that the comprehensive impact assessment, and in particular the stakeholder analysis, showed that some countries would undoubtedly be negatively affected by the measure, and to that purpose supported the possibility for the Committee to grant waivers to specific voyages in the amendments as proposed in document MEPC 76/7/63. Some other delegations suggested that specific impacts should be monitored before taking a decision on the matter before entry into force of the measure. However, the majority of delegations who spoke, also referring to document MEPC 76/7/62, could not support the inclusion of such a waiver clause, stating that data available did not lead to a clear conclusion in favour of an exemption, that flag-wise exemption or waiver was not feasible for international shipping considering its transnational nature, and that the application of a waiver clause would risk undermining the effective implementation of the measure. Several of these delegations could support revisiting the matter in conjunction with the review of the short-term measure.

7.11 Several delegations expressed the view that the concept of "disproportionately negative impacts" was not clearly defined, that no disproportionately negative impact had been identified in the comprehensive impact assessment, and that it was premature to take any decision on this issue. These delegations saw little merit in having a discussion at this session on how to address impacts in the absence of a clear definition of disproportionately negative impacts. Some of these delegations suggested that, following adoption of the measure, an analysis of the disproportionately negative impacts should be undertaken for further consideration at a later session.

7.12 Several delegations expressed the view that the absence of an agreed definition of disproportionately negative impact should not be used as a pretext not to act on addressing negative impacts on States and recalled that the Initial Strategy stated that the impacts on States of a measure should be assessed and taken into account as appropriate before adoption of the measure. In this context some of these delegations expressed the view that negative impacts on the smallest, most vulnerable and most affected States, in particular SIDS and LDCs, should be presumed to be disproportionately negative.

7.13 Some delegations recalled that during MEPC 75 many delegations had highlighted the need to consider the draft amendments and the assessment of their impacts on States as a package, and that accordingly MEPC 76 should consider the draft amendments for adoption and the outcome of the comprehensive impact assessment as a package (MEPC 75/18, paragraph 7.35). These delegations reaffirmed the need for the Committee to follow this approach.

7.14 Some other delegations opposed the "package" approach and expressed the view that attempting to address all potential impacts of a measure was unrealistic, could delay decision-making on GHG reduction measures, that the Initial Strategy did not contain any provisions or requirements referring to such a package approach and that the Committee would not be bound in its decision-making by such an approach.

7.15 In considering document MEPC 76/7/64, many delegations supported the proposal that impacts of the short-term measure should be kept under review in the period up to 2026 so that any necessary adjustments could be made, as also mentioned in the *Procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885);

7.16 Many delegations also supported the conduct of a lessons-learned exercise on the basis of the comprehensive impact assessment of the short-term measure, some of which highlighted that this exercise should be clearly limited in scope, while others supported undertaking this in the wider context of the review of the *Procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885).

7.17 In considering the proposed establishment of a permanent mechanism to address negative impacts on States, some delegations could support such a mechanism, but the majority of the delegations that spoke could not support the proposal at this stage and expressed concerns that this would be a complex process and that it would not be in line with the Initial Strategy. Several delegations expressed caution that any mechanism should be limited to addressing disproportionately negative impacts and that any mitigation of impacts should not undermine the effectiveness of the measure in reducing GHG emissions. One delegation, on behalf of the co-sponsors of document MEPC 76/7/64, clarified that it was not the intention to undermine the effectiveness of the measure but to comply fully with the commitments made in the Initial Strategy.

7.18 Some delegations suggested that the Steering Committee established by MEPC 75 should be instructed to conduct further work on addressing impacts on States. Some delegations further suggested that the Committee could further consider such a process based on the lessons-learned exercise. In this regard, several delegations suggested that the Committee should invite proposals from Member States on concrete actions at future sessions.

7.19 Several delegations highlighted the need to increase technical assistance provided to developing countries to support with the implementation of the short-term measure. In this regard, the Committee recalled that MEPC 75 had invited the Technical Cooperation Committee to initiate discussions on considering possible means of resource mobilization for assisting developing countries, in particular LDCs and SIDS, to complement any response if the comprehensive impact assessment of the short-term measure were to find that there were likely to be disproportionately negative impacts on those States in line with the Initial Strategy (MEPC 75/18, paragraph 7.44).

7.20 Several delegations also expressed the view that the Organization should commission specific studies specifically related to transport costs and economics of shipping for SIDS and LDCs, as suggested in document MEPC 76/7/62, and should also address the areas of missing data as identified in the comprehensive impact assessment.

7.21 In this regard the Committee noted a statement by the delegation of Kenya, supported by the delegations of the Bahamas, Belize, Georgia, Indonesia, Jamaica, Malaysia, Saint Kitts and Nevis, Saudi Arabia, South Africa, Trinidad and Tobago, the United Arab Emirates and Viet Nam, highlighting the role played by Maritime Technology Cooperation Centres (MTCC) in supporting States with implementation of energy efficiency measures, expressing gratitude to the European Union for the financial support provided thus far, and inviting interested parties

to consider ways to ensure their financial sustainability so that MTCCs could continue to operate without interruption, including to provide support with the implementation of the short-term measure. The full text of the statements made by the delegations of Kenya, Belize, Indonesia, Jamaica, and Saint Kitts and Nevis is set out in annex 20. The Committee noted a statement from the observer of the European Commission that possible further assistance was being considered and that information would be provided to the Organization in due course.

7.22 Having considered documents MEPC 76/7, MEPC 76/7/Add.1, MEPC 76/7/13, MEPC 76/INF.68 and addenda, MEPC 76/7/62, MEPC 76/7/63 and MEPC 76/7/64 and the additional information provided orally by the coordinator of the Steering Committee, Mr. Harry Conway (Liberia), the Committee took action as outlined in the following paragraphs.

7.23 The Committee noted that the Steering Committee had concluded that the comprehensive impact assessment of the short-term measure fulfilled the terms of reference and timelines agreed by MEPC 75 and noted documents MEPC 76/7/13 and MEPC 76/INF.68 and addendum.

7.24 The Committee thanked the Governments of Cyprus, Denmark, France, Germany, the Netherlands and Norway for their financial contributions towards the conduct of the comprehensive impact assessment of the short-term measure. The Committee expressed its appreciation to all the experts, in particular WMU, DNV, NUS, UNCTAD and Starcrest, having contributed to the comprehensive impact assessment, to the coordinator, Mr. Harry Conway (Liberia) and the other members of the Steering Committee of Member States for having overseen the conduct of the assessment.

7.25 The Committee reaffirmed, in line with the *Procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885), keeping the implementation and impacts of the short-term measure under review, so that any necessary adjustments might be made, and in that context recalled that MEPC 75 had already agreed to insert a paragraph to that purpose in the resolution text accompanying the amendments, which was included in the draft resolution set out in document MEPC 76/3.

7.26 The Committee recalled further that during MEPC 75 many delegations had highlighted the need to consider the draft amendments and the assessment of their impacts on States as a package, and that accordingly MEPC 76 should consider the draft amendments for adoption and the outcome of the comprehensive impact assessment as a package (MEPC 75/18, paragraph 7.35).

7.27 The Committee agreed that a lessons-learned exercise should be undertaken to draw lessons from the comprehensive impact assessment of the short-term measure for the conduct of future impact assessments, including how disproportionately negative impacts could be identified with a view to addressing them, as appropriate.

7.28 To that effect the Committee agreed to include the following additional paragraph in the resolution text, as an operative paragraph, on the adoption of the amendments to MARPOL Annex VI on the short-term measure: "Agrees to undertake a lessons-learned exercise from the comprehensive impact assessment of the amendments to MARPOL Annex VI, with a view to improving the procedure for conducting future impact assessments, taking into account the *Procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885) and the terms of reference for the impact assessment of the short-term measure;"

7.29 The Committee agreed that this lessons-learned exercise should take place as soon as possible so as to apply those lessons to future assessments in line with the Initial Strategy.

7.30 The Committee did not agree to the inclusion of a waiver clause to the draft amendments but instead agreed that the Committee could revisit this matter in conjunction with the review of the short-term measure to be completed by 1 January 2026.

7.31 The Committee considered a proposal to initiate a work on a mechanism for addressing disproportionately negative impacts on States, including developing countries, especially SIDS and LDCs, at this session. However, there was no wide support at this session.

7.32 To that purpose, the Committee invited Member States and international organizations to submit concrete proposals on how to keep the impacts of the short-term measure under review and how to undertake a lessons-learned exercise to the next session of the Committee, to be firstly considered by ISWG-GHG 10.

7.33 Furthermore, having noted various requests for additional technical assistance, resource mobilization and data gathering to support States with the implementation of the measure, the Committee requested the Technical Cooperation Committee to consider ways to provide enhanced support in the first years of implementation of the measure.

7.34 In conclusion, the Committee approved, in general, the report on the comprehensive impact assessment as set out in documents MEPC 76/7/13 and MEPC 76/INF.68 and addendum.

7.35 The Committee noted the concern expressed by the delegation of the United States emphasizing the need for language used by the Committee when formulating any decision regarding impact assessments to be consistent with the Initial IMO GHG Strategy.

7.36 As requested, the statements made by the delegations of Argentina, Belgium, the Cook Islands, Germany, India, Indonesia, Solomon Islands, Tuvalu, the United Arab Emirates and the observer from Pacific Environment are set out in annex 20.

Secretariat support for the Organization's work on GHG emissions reduction

7.37 The Committee considered document MEPC 76/7/18 (Secretariat) outlining the scope of the Secretariat's support to the Organization's work on GHG emissions reduction, including impact assessments, and containing proposals on how to further support the Committee and Member States in their work on GHG emissions reduction.

7.38 In the ensuing discussion, all delegations that spoke expressed their appreciation for the work of the Secretariat and acknowledged the need to enhance human resources capacities within the Marine Environment Division with a view to further supporting the Committee and Member States in their work on GHG emissions reduction.

7.39 In supporting the continued consideration of the proposal by the Secretariat at C 125, the Committee noted that some delegations stressed the importance of ensuring an equitable geographical and gender representation, and also noted that the additional officers could also support other subject areas within the Marine Environment Division; that how to finance additional posts, e.g. by supplementary contributions by Member States, should be considered by the Council; that increasing human resource capacity could also be provided for other areas in MED; and that increasing human resources could also be considered for divisions and departments within the Secretariat. In this context the Committee noted an intervention by a delegation recommending further acknowledgement by Council of the Organization's role as a specialized technical body and the need to prioritize the staffing needs of its technical divisions over those of the support divisions with a view to making the necessary additional budget allocation within zero nominal growth for the next biennium of 2022-2023 for recruiting two additional professional officers in the Air Pollution and Energy Efficiency Section of the Marine Environment Division.

7.40 Following consideration the Committee noted the ever-increasing demand for the Secretariat's support for the Organization's work on GHG emissions reduction and agreed to:

- .1 recognize that in accordance with its Strategic Plan, reducing GHG emissions from ships was a priority for the Organization, while also recognizing the continuously growing workload for the Marine Environment Division in relation to the Committee's various work streams on GHG reduction measures, including increasing intersessional work;
- .2 support the need to enhance the human resource capacity in the Marine Environment Division working on GHG-related issues to continue to adequately support the Committee and Member States in their GHG-related deliberations also taking into account the need to ensure an equitable geographical and gender representation; and
- .3 recommend further consideration at Council with a view to making the necessary additional budget allocation for the next biennium of 2022-2023 for recruiting two additional professional officers in the Air Pollution and Energy Efficiency Section of the Marine Environment Division.

Eighth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 8)

7.41 The Committee noted that the eighth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 8) had been held remotely from 24 to 28 May 2021 and that its report had been submitted to it as document MEPC 76/WP.4.

7.42 The Committee noted that ISWG-GHG 8 had considered the report of the Correspondence Group on the Development of Technical Guidelines on Carbon Intensity Reduction in conjunction with those documents submitted to MEPC 76 which commented on the report of the Correspondence Group, as follows:

- .1 MEPC 76/7/3, MEPC 76/7/4, MEPC 76/7/5, MEPC 76/7/6, MEPC 76/INF.7, MEPC 76/INF.8, MEPC 76/INF.9 and MEPC 76/INF.10 (China et al.) providing the report of the Correspondence Group on the Development of Technical Guidelines on Carbon Intensity Reduction established at MEPC 75 on the draft technical guidelines supporting the EEXI framework; the draft technical guidelines supporting the CII framework; the updated SEEMP Guidelines; the update of other existing guidelines; a summary of comments provided to the Correspondence Group; and a technical report on CII guidelines development prepared by the coordinators of the Correspondence Group, respectively;
- .2 MEPC 76/7/14 (INTERFERRY) suggesting that high-speed craft (HSC) should be defined as a separate sector from ro-ro passenger ships in MARPOL Annex VI chapter 4 and for the purposes of the IMO DCS; arguing that, according to the principles set out when the EEDI was developed, these ships could not be categorized together because their type of propulsion was drastically different and because they could not substitute each other; and suggesting that an HSC reference line be established and that proposals to treat the HSC sector separately should be considered as part of the planned review of the CII framework expected to take place by 2026;

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- .3 MEPC 76/7/16 (RINA and the Nautical Institute) providing information on member and wider industry consultation conducted by the Nautical Institute and RINA on EEXI and the development of technical guidelines on carbon intensity; noting issues that might be of interest to the Committee; and proposing potential amendments to the draft guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve tending to facilitate access to power reserve override by the crew when required for safety reasons by removing technical or administrative barriers which could discourage it;
 - .4 MEPC 76/7/19 (Netherlands) supporting the inclusion of compensation factors for cargo treatment related energy use (heating/cooling) and cargo handling (loading gears) as these operations could have a significant effect on the CII value and might even make it impossible to reach the appropriate rating; proposing to limit the compensation factor to a maximum of 75% of the calculated value and to reduce this percentage by 3% per year to avoid over-compensation and to continue to incentivize the efficiency optimization of the operational aspect which was being compensated; proposing to widen the rating band for general cargo ships and container ships below 20,000 DWT in order to address the issue of the high scatter caused by the huge variation of ship designs and operational profile in these categories; and suggesting an alternative rating band proposal for general cargo and container ships;
 - .5 MEPC 76/7/21 (Estonia et al.) proposing, in addition to document MEPC 76/3/5 (Estonia et al.) in favour of voyage exclusions for ice-classed ships when sailing in ice conditions for calculation of the attained CII for these ships, a definition of "sailing in ice conditions" as "sailing of an ice-classed ship in a sea area within the ice edge"; this definition differing from previous ones (operational capabilities and limitations in ice given in MSC.1/Circ.1519 and minimum parameter of ice thickness required for operation of ice class ships given in HELCOM Recommendation 25/7) which might be too complicated and might not cover all possible situations;
 - .6 MEPC 76/7/23 (France) proposing a method to assess the possibility to include potential correction factors and voyage exclusions in the CII framework; suggesting four criteria to assess the possibility and the appropriateness of inserting correction factors and voyage exclusions: 1) policy justification, 2) accuracy, 3) applicability of the measures, and 4) capacity to assess their effects; providing a basic assessment analysis of the options on correction factors and voyage exclusions remaining in discussion; suggesting continuing to carry out research and studies, encouraging submission of the necessary additional supporting data in THETIS-MRV and suggesting initiating a revision of the IMO DCS to enable this submission; and advising that this way the correction factors and voyage exclusions could be considered during the review to be conducted before 1 January 2026 with the additional necessary data;
 - .7 MEPC 76/7/24 (France and the United States) analysing and discussing the relevance of the remaining options on the measurement of the 2030 target and the already achieved carbon intensity improvement in the Reduction factors guidelines (G3) developed by the Correspondence Group on the Development of Technical Guidelines on Carbon Intensity Reduction; and suggesting using the supply-based measurement to determine the 2030 target and the already achieved carbon intensity improvement and proposing to consider amending the IMO DCS to obtain reliable data and consistent quantifications to consolidate the demand-based metrics;

- .8 MEPC 76/7/25 (Indonesia et al.) providing additional information to that already provided to the Correspondence Group on the Development of Technical Guidelines on Carbon Intensity Reduction related to excluding operations in severe adverse weather conditions from a ship's CII rating calculation; supporting the exclusion from CII ratings of the voyage in weather conditions at, or more severe than, sea state 7 Beaufort in the draft guidelines but maintaining the mandatory reporting of aggregate emissions to the IMO Data Collection System (DCS); and suggesting that this exception be addressed at the 2026 review stage to evaluate if it can be normalized;
- .9 MEPC 76/7/27 (INTERTANKO) outlining the distinct operations that shuttle tankers perform due to their nature compared to regular tankers and which result in significantly higher fuel consumption; suggesting that this small group of tankers be considered as a different category instead of being kept part of the "tankers" ship group; and proposing correction factors to be applied in case shuttle tankers were maintained in the "tankers" group;
- .10 MEPC 76/7/28 (RINA) proposing to amend the draft guidelines on survey and certification of the attained EEXI in order to support the use of numerical methods as an equivalent to model tests for the purposes of estimating the reference speed V_{ref} , and also proposing in view of this to request IACS to develop a common understanding on acceptable methodologies for performing and verifying numerical powering calculations;
- .11 MEPC 76/7/29 (ICS and WSC) outlining why calculating the energy consumption associated with refrigerated containers was critical to creating an equitable CII rating system for container ships transporting chilled and frozen cargoes; also explaining how it would result in disproportionate impacts on specific Member State exports and imports that were heavily dependent upon the shipment of goods requiring refrigeration; suggesting applying a correction factor to container ships and proposing a detailed method for calculating the relevant energy consumed to refrigerate containers on board while suggesting the report to the IMO DCS of the total fuel consumption of the ship;
- .12 MEPC 76/7/30 (CLIA and WSC) providing a detailed discussion of the advantages of a "fleet-level monitoring" (FLM) option; pointing out that a CII monitoring system focusing on individual ships would invariably lead the owners and operators to put their efforts on those ships that received lower ratings rather than resulting in their retirement; stating that, on the contrary, FLM could encourage new and innovative investments in shipboard technologies, alternative fuels and the introduction of high performing ships; and proposing a method for ensuring the compliance and enforcement of this option;
- .13 MEPC 76/7/33 (WSC) outlining issues that arose in the data and rationale for ship type-specific CII reduction rates; highlighting a gap between the estimated efficiency improvements achieved and the actual efficiency improvement noted in the 2019 IMO DCS data; and recommending the use of a single uniform annual reduction rate ("flat") as the most equitable means to promote further efficiency improvements across the fleet as a whole considering the disparities found in the 2019 figures for the suggested ship type-specific reduction rates;

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- .14 MEPC 76/7/34 (CLIA) assessing that the CII calculation was not likely to incentivize reduction of absolute emissions in the cruise sector as it used a distance variable in the denominator; revealing that the current method of calculation encouraged cruise passenger ships to travel greater distances (which would potentially lead to increase absolute emissions) to get a better CII rating while cruise passenger ships spent on average between 25% and 30% of the total time of a normal voyage in port (in which emissions typically accounted for around 15% of a cruise ship's total); and proposing as alternatives to allow ships which spent more than 20% of their time in port annually to exclude such time from the CII calculation or to apply a correction factor to provide an equivalent number of nautical miles travelled (suggested to be 15 nm) per hour in port;
- .15 MEPC 76/7/35 (Italy) proposing amendments to the draft guidelines on the method of calculation of the attained EEXI for ro-ro cargo ships (vehicle carriers); assessing that the use of DWT instead of GT in the calculation of the attained EEXI led to an underestimation of the energy efficiency for ships within this ship type which had been considered volume carrier ships; and while the Correspondence Group had recognized that GT instead of DWT was a better metric to describe the cargo transported, proposing to introduce a correction factor for ro-ro cargo ships (vehicle carrier) with a DWT/GT ratio lower than the average (0.35);
- .16 MEPC 76/7/36 (IPTA) assessing that a number of factors affecting fuel consumption, such as cargo heating, tank washing and operation of nitrogen generators, had to be properly addressed to provide an accurate picture of the efficiency of individual chemical tankers; and proposing that in order to reduce the inequities in calculation of CII, 85% of fuel consumed by the boilers on tankers be excluded from this calculation, although not from the DCS report and also, as part of the review, that a study be carried out into the drivers affecting chemical tankers AER results;
- .17 MEPC 76/7/37 (IACS) commenting on the report of the Correspondence Group on the Development of Technical Guidelines on Carbon Intensity Reduction (TOR 3 and TOR 4), with particular reference to the SEEMP and recommending that the Committee provide clarification on the role of the SEEMP, on verification audits applicable to all ships, regardless of rating, on the conduct of the SEEMP verification and on the plan of corrective actions;
- .18 MEPC 76/7/38 (Pacific Environment and CSC) recommending the adoption of the strongest possible reduction rates to build up the short-term measure's ambition, transparency and implementation; suggesting in this regard that the power of main engines be represented by 87% MCR_{lim} (instead of 75% MCR_{lim}) or 75% of original installed power, whichever was lower for each main engine; assessing that this would roughly double absolute emission reductions under the EEXI in 2030; stating a preference for supply-based measurement of 2030 target (Option 2A) and flat reduction factors for the CII framework and not supporting any voyage exclusion or correction factors;
- .19 MEPC 76/7/41 (Denmark) estimating that, without any clear incentives or benefits for such front-runners in the short-term regulation, many companies would currently not be able to bear the additional costs of a transition toward low- or carbon neutral fuels and maintain their competitiveness in the market; and proposing a fleet-averaging approach whereby each ship in a shared

- fleet would include a balance sheet in its SEEMP and inviting the Committee to re-establish the Correspondence Group to finalize the guidelines taking into account this concept;
- .20 MEPC 76/7/43 (INTERCARGO) supporting the exclusion of fuel consumption relating to cargo operations from a ship's carbon intensity indicator (CII) rating calculation; and proposing a correction of 100% in order to ensure the comparability between ships and to avoid unfair disadvantages for ships servicing ports without shore infrastructure as well as the concerned States while the draft guidelines on operational intensity indicator and the calculation methods introduced a correction factor of 75% for cargo handling;
- .21 MEPC 76/7/44 (Republic of Korea) suggesting reflecting onboard CO₂ capture, as one GHG emissions reduction technology, in the CII framework by removing the square brackets in the formula for calculation of the mass of CO₂ emissions; and also proposing to amend the formula for calculation of the mass of CO₂ emissions (*M*) to cover all CO₂ capture systems by inclusion of a variable with the mass of CO₂ captured from flue gas measured;
- .22 MEPC 76/7/46 (INTERTANKO) highlighting the need to apply a correction factor to account for the energy consumption for cargo cooling onboard gas carriers; proposing two different options to calculate it depending on whether the ship had the ability, or not to monitor fuel consumption to the cooling system/plant used for the cargo cooling; and suggesting applying a [85%] "load factor" to the fuel used for cargo handling/cooling and an additional [2%] annual reduction of the "load factor" with the intent to encourage efficiency improvements in equipment/operations of cargo cooling;
- .23 MEPC 76/7/47 (IACS) proposing modifications to the draft guidelines on survey and certification of the attained EEXI, suggesting inserting specifications regarding the use of numerical calculations as an alternative to model tests and seeking clarifications about the possible verification and aggregation of data collected during trial CIIs on a voluntary basis; and requesting also clarifications about how the verification of ships' explanation for not reaching the required CII performance should be done if it were included in the Statement of Compliance;
- .24 MEPC 76/7/48 (INTERTANKO) commenting on the Correspondence Group option for the CII annual reduction rate based on "supply-based measurement"; using data reported by tanker operators and data from the Third and Fourth IMO GHG Studies, which indicated that tankers' AER values in 2018-2020 were between 28% and close to 35% below the value for 2008 and the net fuel consumptions had been reduced by over 30%, even over 40%; showing however the strong influence that "total distance" had on the attained AER value and recommending considering the attained AER value of the tanker fleet instead; and suggesting establishing the CII reduction factors relative to the 2019 reference line for tankers as proposed under the "demand-based measurement", i.e. 0.50% annually;
- .25 MEPC 76/7/50 (United States) providing comments on the incorporation of the overridable engine power limit (OPL) concept into the draft EEXI guidelines; estimating that the methodology for calculating the effect of an OPL overstated the efficiency gains, and therefore the GHG reduction

- impact, of installing such technology; proposing an alternative approach named EngPoLi (Engine Power Limit) and suggesting it would be considered together with the ShaPoLi methodology proposed for calculating P_{ME} for a ship equipped with OPL; and also suggesting keeping the option to set the power of main engines ($P_{ME(i)}$) at 87% of OPL in the EEXI formula for cases where EngPoLi was installed;
- .26 MEPC 76/7/51 (RINA) addressing issues regarding DCS data inaccuracy especially linked to the anonymization of it, which made it impossible for shipowners and potential users to undertake verifications; raising the point that the CII's dependence on distance travelled could result in an incentive for ships to increase this distance and hence CO₂ emissions in the end; seeking clarifications with regard to the correction factors and voyage exclusions and assessing that their verification would necessitate amendments to the *2017 Guidelines for Administration verification of ship fuel oil consumption data*; and suggesting amending the DCS to be able to analyse the impact and effect of these correction factors and voyage exclusions;
- .27 MEPC 76/7/52 (Greece) suggesting that the additional energy consumption for LNG carriers which was necessary for cooling the temperature and maintaining the pressure of the cargo for transportation should not be included in the calculation of the attained CII to avoid unfair treatment because of the cargo handling technology and not related to ship's performance; and recommending detailed procedures that allowed both LNG carriers and the Administration to specifically identify fuel consumed for cargo handling;
- .28 MEPC 76/7/53 (Greece) suggesting that all EEDI capacity correction factors should be equally applicable to CII calculations because AER was a capacity related indicator (DWT); supporting the principle that the Guidelines should ensure an equal distribution of rating values and therefore supporting the development of separate reference lines according to each size range/segment; stating that shipping's carbon intensity improvement to 2019 relative to 2008, and thus the 2030 carbon intensity gap, should be calculated using the demand-based carbon intensity (Option 1A); and arguing that ship type-specific reduction factors would promote fairness as different ship types had achieved different carbon intensity improvement and had different potential for further improvement;
- .29 MEPC 76/7/54 (Greece) suggesting that the $P_{ME(i)}$ should remain at 75% of MCR_{lim} as currently included in the draft guidelines and in line with the EEDI calculations to prevent confusion and in order to ensure a level playing field; supporting the proposal put forward by BIMCO and RINA in document ISWG-GHG 8/2/Rev.1 by including in the draft EEXI calculation guidelines an alternative method to determine V_{ref} , by using empirical data from sea trial tests or the daily ship performance recordings if the statistical evaluation method of V_{ref} was not followed; suggesting that performance margin m_v should be set at 2.5% of the average speed or 0.5 knot, whichever was lower when the statistical method was used; and suggesting also amending the draft guidelines on the method of calculation of the attained EEXI so that, in accordance with current EEDI standards and under the supervision of a recognized organization (RO), ships should be allowed to perform in-service sea trials to determine the required power-speed curve;

- .30 MEPC 76/7/55 (Greece) observing unjustified distortions in CII rating of smaller bulk carriers and tankers resulting in an increase in the number of ships rated D and E and suggesting, after a detailed evaluation of the biased ratings of ships disadvantaged by their size within the different ship types, developing size-dependent correction factors for adjusting the rating boundaries (reducing d1 and d2 and increasing d3 and d4) so their ratings would be fairly distributed as originally intended;
- .31 MEPC 76/7/56 (CLIA) stating that the seven- or six-month period allowed by the procedures associated with carrying out the CII measurement would not leave enough time for shipowners to make substantial adjustments to their operational profile; and proposing an amendment to the draft revised guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP) and the development of an MEPC circular indicating to Administrations that ships implementing a plan of corrective actions should be given two to three years for the plan to reflect changes in their attained CII and rating;
- .32 MEPC 76/7/59 (India) proposing to include in the draft guidelines on survey and certification of the EEXI an additional figure providing an example speed-power curve representing pre-EEDI ships with sea trial result calibrated to design draught, falling under the scope of paragraph 2.2.3.4 of the draft guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI);
- .33 MEPC 76/INF.41 (Netherlands) providing a study conducted by MARIN and CONOSHIP international analysing the effect of the CII framework on general cargo ships, container ships and tankers with a focus on the small ship segments of these ship types; observing unjustified distortions in rating small ships and assessing that a significant number of general cargo and container ships would fall into D and E rating according to the current reference lines and rating bands; and proposing that corrections to ratings bands for these ship types be considered; and
- .34 MEPC 76/INF.60 (Denmark) providing a study exploring the way in which the short-term measure agreed at MEPC 75 could be used to incentivize the uptake of low- or zero-carbon fuels by allowing fleet averaging, as an option, to comply with the CII framework; assuming that the money which would otherwise have been spent on improving the CII of all non-compliant ships could be used to let some ships of the fleet sail on low- and zero-carbon fuels in such a way that the total emissions would not exceed the emissions of a compliant fleet; revealing, in a business-case analysis for using low- and zero-carbon fuels for both individual ships and fleets, that on average 25% to 50% of the additional costs of using low- and zero-carbon fuels could be covered by not investing in the improvements of other ships in the fleet; and providing data that could be utilized in the further consideration of the incorporation of a fleet-averaging approach into the SEEMP Guidelines.

7.43 Having considered the report of ISWG-GHG 8 (MEPC 76/WP.4) and the additional information provided orally by the Chair of the Group, Mr. Sveinung Oftedal (Norway), the Committee approved the report in general and took action as described below.

Finalization of the draft technical guidelines supporting the EEXI framework

7.44 The Committee noted the Group's discussion on the finalization of the draft technical guidelines supporting the EEXI framework.

7.45 Following consideration, the Committee adopted the following resolutions:

- .1 resolution MEPC.333(76) on the *2021 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI)*, as set out in annex 7;
- .2 resolution MEPC.334(76) on the *2021 Guidelines on survey and certification of the Energy Efficiency Existing Ship Index (EEXI)*, as set out in annex 8; and
- .3 resolution MEPC.335(76) on the *2021 Guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve*, as set out in annex 9.

7.46 In considering the draft 2021 guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve, the observer of the Nautical Institute expressed its appreciation to all involved in the ISWG-GHG and Correspondence Group processes for taking inputs on board related to safe operation of shaft/engine power requirements. The full text of the statement is set out in annex 20.

Finalization of the draft technical guidelines supporting the CII framework

7.47 The Committee noted the Group's discussion on the finalization of the draft technical guidelines supporting the CII framework.

7.48 In the ensuing discussion, the delegation of Norway expressed the view that the Organization should initiate a new workstream on expanding the IMO's Data Collection System (DCS) to also include cargo related data which would allow for developing a more accurate data set to facilitate monitoring of transport work.

7.49 The delegation of the Cook Islands noted the inconsistency in the fact that, following consideration of document MEPC 76/7/63 (Antigua and Barbuda et al.), the Committee had agreed to not include the possibility of granting a waiver directly linked to the review of the comprehensive impact assessment from the short-term measure in the draft amendments, while at the same time not deleting the existing blanket waiver contained in regulation 19.4 of MARPOL Annex VI.

7.50 The Committee noted a statement by the observer of CLIA regarding their document MEPC 76/7/34 proposing ships which spent considerable time in ports to exclude such time from the CII calculations or to apply a correction factor. The Committee further noted that document MEPC 76/7/34 had been included in the draft terms of reference for the Correspondence Group on Carbon Intensity Reduction. As requested, the statement made by the observer from CLIA is set out in annex 20.

Carbon intensity indicators and calculation methods

7.51 Following consideration, the Committee adopted resolution MEPC.336(76) on the *2021 Guidelines on operational carbon intensity indicators and the calculation methods (CII Guidelines, G1)*, as set out in annex 10.

CII reference lines

7.52 Following consideration, the Committee adopted resolution MEPC.337(76) on the *2021 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2)*, as set out in annex 11 and authorized the Secretariat to finalize the guidelines following recalculations using non-rounded DCS data as set out in document ISWG-GHG 8/WP.1/Rev.1/Add.1 (Secretariat).

CII reduction factors

7.53 In considering the draft 2021 guidelines on the operational carbon intensity reduction factors relative to reference lines (CII Reduction factor Guidelines, G3), the majority of delegations supported the compromise proposal forwarded by ISWG-GHG 8, stating that the proposal represented a prudent and realistic target for international shipping, based on evidence and consistent with the scope of the impact assessment. These delegations stated that 1% and 2% annual carbon intensity reduction were beyond business-as-usual, that the increase in ship sizes would actually lead to a larger effective CII reduction than what was in the G3 guidelines and, therefore, that in their view the CII reduction rates were consistent with the 2030 level of ambition of the Initial Strategy. In this regard, as requested, the statements made by the delegations of China, the Cook Islands, India, Philippines, the United Arab Emirates and Venezuela are set out in annex 20.

7.54 Some delegations, while expressing general support for the outcome of the Group on G3 in a spirit of compromise, highlighted that more ambitious GHG reduction efforts would be needed in order to achieve the levels of ambition set out in the Initial IMO Strategy.

7.55 Some other delegations, while supporting the principle of a phased approach and acknowledging the work done to try to bridge the divergent views, were not able to support the outcome of ISWG-GHG 8 on CII reduction rates, stating that the reduction rates set for phases 1 and 2 (1% and 2% annually, respectively) were insufficient to ensure a carbon intensity reduction of at least 22% and to incentivize behavioural change and that keeping phase 3 blank until the review stage would generate significant uncertainties for the industry and could therefore not be supported. These delegations reaffirmed their commitment to work with fellow Member States in further developing an appropriate international regulatory framework to reduce GHG emissions from ships in line with the vision and ambitions set out in the Initial IMO GHG Strategy. In this regard, as requested, the statement made by the delegation of Portugal, supported by statements of the delegations of Belgium, Denmark, Germany, the Netherlands and Sweden, are set out in annex 20.

7.56 Some delegations rejected the outcome of ISWG-GHG 8 on G3, expressly stating that the minimum CII reduction rate consistent with the Paris Agreement temperature goal would have to be at least 22% reduction by 2026 compared with 2019. In this regard, as requested, the statements made by the delegations of Canada, Jamaica, the Marshall Islands and Solomon Islands are set out in annex 20.

7.57 Several delegations, both supporting and not supporting the outcome of ISWG-GHG 8, further stated that there was an urgent need for the Organization to proceed and develop mid- and long-term measures to effectively deliver on the levels of ambition laid down in the Initial Strategy, and which might also contribute to the 2030 target.

7.58 As requested, the statements made by the observers from CESA and Pacific Environment are set out in annex 20.

7.59 Following consideration, the Committee adopted resolution MEPC.338(76) on the *2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII Reduction Factor Guidelines, G3)*, as set out in annex 12.

CII rating

7.60 Following consideration, the Committee adopted resolution MEPC.339(76) on the *2021 Guidelines on the operational carbon intensity rating of ships (CII Rating Guidelines, G4)*, as set out in annex 13 and authorized the Secretariat to finalize the guidelines following recalculations using non-rounded DCS data as set out in document ISWG-GHG 8/WP.1/Rev.1/Add.1 (Secretariat).

Update of the Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)

7.61 The Committee noted the Group's discussion on the update of the *Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)*.

Draft terms of reference for the Correspondence Group on Carbon Intensity Reduction

7.62 The Committee established a Correspondence Group on Carbon Intensity Reduction, under the joint coordination of China, Japan and the European Commission,¹ with the following terms of reference:

Taking into consideration the outcome of the consideration by MEPC 76 of the draft amendments to MARPOL Annex VI on the short-term measure and the associated comprehensive impact assessment:

- .1 further consider and finalize the draft updated guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP), using documents MEPC 76/7/6 and MEPC 76/INF.9 as a basis, taking into account document MEPC 76/7/37, comments and decisions made at ISWG-GHG 8 and MEPC 76, and paying particular attention to the role and structure of the SEEMP for ships to which regulation 28 applies and other proposals for inclusion into the SEEMP guidelines, as set out in paragraph 15 of document MEPC 76/7/6;

¹ Dr. Shuang ZHANG
Associate Professor
Dalian Maritime University, China
Email: zhangshuang_dmu@163.com

Mr. Kohei IWAKI
Director for Environment Policy
Ocean Development and Environment Policy Division
Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan
Tel: +81 3 5253 8118
Email: 6iwaki@gmail.com

Mr. Kees METSELAAR
Naval Architect
Maritime Safety Unit, DM 28 3/034
European Commission
Tel: +32 2 298 3677
Email: kees.metselaar@ec.europa.eu

- .2 further consider and update existing guidelines, procedures or guidance, taking into account comments and decisions made at ISWG-GHG 8 and MEPC 76, including:
 - .1 *2017 Guidelines for administration verification of ship fuel oil consumption data* (resolution MEPC.292(71));
 - .2 *2017 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database* (resolution MEPC.293(71));
 - .3 *Procedure on Submission of data to the IMO data collection system of fuel oil consumption of ships from a State not Party to MARPOL Annex VI* (MEPC.1/Circ.871); and
 - .4 *Procedures for port State control, 2019* (resolution A.1138(31));
- .3 develop draft guidelines on correction factors for certain ship types, operational profiles and/or voyages for the CII calculations (G5) as appropriate, using document MEPC 76/7/5 as a basis and using the assessment criteria provided in document MEPC 76/7/23 as a guidance, taking into account documents ISWG-GHG 8/3, ISWG-GHG 8/3/1, ISWG-GHG 8/3/2, MEPC 76/7/19, MEPC 76/7/21, MEPC 76/7/25, MEPC 76/7/26, MEPC 76/7/27, MEPC 76/7/29, MEPC 76/7/34, MEPC 76/7/36, MEPC 76/7/43, MEPC 76/7/46, MEPC 76/7/52, MEPC 76/7/53, MEPC 76/7/55, MEPC 76/INF.41 and MEPC 76/INF.68, and to consider a separate category for HSC RoPax, using document MEPC 76/7/14 as a basis, also taking into account comments and decisions made at ISWG-GHG 8 and MEPC 76;
- .4 develop in new or existing guidelines specific guidance on:
 - .1 the audit and verification processes of the SEEMP including the framework for verification of the SEEMP by Administrations and verification of revised SEEMP for ships required to develop a plan of corrective actions (PCA);
 - .2 develop possible parameters and templates for reporting, verification and submission of data for trial CIIs of individual ships on voluntary basis as specified in the G1 guideline and for other trial metrics of offshore and marine contracting vessels, taking into account documents MEPC 76/5/1, MEPC 76/5/3, MEPC 76/7/34 and MEPC 76/7/47; and
 - .3 aggregation and reporting of ship's fuel consumption data to the new Administration and/or company in the event of change from one Administration to another and/or from one company to another; and
- .5 submit an interim report to MEPC 77 to be first considered by ISWG-GHG 10, and a final report to MEPC 78 in 2022, to be first considered by ISWG-GHG 11.

Revised proposal for an international maritime research and development board

7.63 The Committee recalled that MEPC 75 had acknowledged the proposal by industry organizations to establish an international maritime research and development board (IMRB) and had noted diverging views and concerns on the proposal contained in document MEPC 75/7/4 (ICS et al.), in particular with regard to various operational, administrative, legal and governance aspects.

7.64 The Committee also recalled that MEPC 75 had noted that the IMRB proposal would require more detailed consideration, taking into account documents submitted and comments made on the proposal at that session, including consideration of its possible impacts on States, before taking any decisions on the proposal.

7.65 The Committee further recalled that MEPC 75 had invited interested Member States and international organizations to submit further commenting documents and other proposals related to the proposal contained in document MEPC 75/7/4.

7.66 In this regard the Committee considered documents MEPC 76/7/7 and MEPC 76/7/8 (Denmark et al.) and noted in the co-sponsors' view that the proposal had been refined to take into account views and concerns expressed at MEPC 75; included proposed draft amendments to MARPOL Annex VI for the establishment of the IMRB and IMRF; and also included changes to address specific concerns and suggestions raised by some Member States at MEPC 75, including, inter alia:

- .1 to provide supplementary support to IMO's ITCP and the IMO GHG TC-Trust Fund to assist maritime GHG reduction efforts of developing countries, in particular LDCs and SIDS;
- .2 the governance structure had been further clarified and it was proposed that the fund suggested to be established (the IMRF) should be governed within the Organization, not by a stand-alone NGO, as was originally proposed;
- .3 a comprehensive impact assessment had been carried out as set out in document MEPC 76/7/8;
- .4 legal questions concerning incorporating the IMRB and IMRF in MARPOL Annex VI had been addressed;
- .5 the administrative burden on flag States to ensure compliance had been addressed; and
- .6 intellectual property concerns had been addressed.

7.67 The Committee noted that the co-sponsors of documents MEPC 76/7/7 and MEPC 76/7/8 were of the view that the proposal was a short-term measure to be approved at MEPC 77 in November 2021 and established before 2023; had not been designed as a market-based measure (MBM); that there were no regulatory obstacles to including the necessary legal provisions in MARPOL Annex VI; was fully aligned with the purpose of the MARPOL Convention of contributing to the protection of the marine environment; and that there was a need to approve the amendments to MARPOL Annex VI rapidly for the IMRB to have the biggest impact in terms of promoting R&D projects.

7.68 The Committee also noted the impact assessment on States accompanying the IMRB proposal, as set out in document MEPC 76/7/8, which had assessed the principal potential negative economic impacts on States of a mandatory US\$2 per tonne R&D contribution on

marine bunker fuel oil costs, freight rates, the price of shipped cargoes to consumers, and the impact on States' economies and GDP, and that the assessment concluded that the IMRB proposal would have no disproportionately negative impact on States, including LDCs and SIDS, and on States that were geographically distant from their markets.

7.69 The Committee also had for its consideration the following commenting documents:

- .1 MEPC 76/7/20 (Argentina et al.) commenting on the mandate, purpose and legal mechanism of the IMRB; emphasizing that the IMRB should be consistent with the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC) in the light of different national circumstances to support the development and deployment of low-carbon and zero-carbon fuels and technologies in developing countries, in particular SIDS and LDCs; that it would be more appropriate to establish a subsidiary body under IMO, with management body equally represented by developed and developing countries from different geographic regions; and that it was premature to set up the IMRB and IMRF through amendments to MARPOL;
- .2 MEPC 76/7/45 (ICS et al.) providing further clarifications on the IMRB/IMRF proposal, in particular in response to document MEPC 76/7/20; suggesting that finalization of the IMRB/IMRF and consideration of possible MBMs should be discussed in parallel and that both measures should be seen as complementary rather than as "either/or" alternatives; agreeing that the IMRB should be cognizant of CBDR-RC and resolution MEPC.229(65) while also highlighting the requirements for all ships to give full and complete effect, regardless of flag, to implementing mandatory measures to ensure the effective implementation of the strategy and the principles of non-discrimination and no more favourable treatment;
- .3 MEPC 76/7/49 (Marshall Islands and Solomon Islands) suggesting that there was already sufficient investment going into shipping decarbonization R&D; that the IMRB/IMRF would not provide significantly additional support to accelerate the deployment of zero-carbon new fuels and energy sources in this decade, in line with the Initial Strategy; that the IMRB/IMRF would not ensure that funds would be available to provide targeted and significant support to ship energy and fuel transition in developing countries and particularly SIDS and LDCs; and that IMO could better provide the functionality of the IMRB/IMRF through the more efficient, comprehensive and appropriate policy option based on a \$100 carbon levy, as proposed in document MEPC 76/7/12 (Marshall Islands and Solomon Islands);
- .4 MEPC 76/7/57 (Turkey) expressing concerns that the refined proposal still did not provide enough clarity on the issue of the management of intellectual property rights (IPRs) related to R&D; recommending establishing a mechanism for the management of IPRs; that patents should be made available and accessible; that patented technologies should be enjoyed without discrimination as to the place of invention and whether products were imported or locally produced; and that the outcome of R&D activities funded by the entire maritime cluster would be used in an equitable and fair manner by all; and
- .5 MEPC 76/7/58 (Turkey) noting that, while the IMRB was listed under candidate short-term measures in the Initial Strategy, the Strategy did not say that the IMRB would have to be implemented via a stand-alone new fund;

therefore suggesting that the IMRB and the establishment of a new fund would need to be evaluated separately; and that more clarity was required in relation to structure, member selection procedure and criteria of the IMRB Nominating Committee as well as the financial structure of the R&D Fund proposing a funding method differentiated by the development status of States.

7.70 The Committee noted document MEPC 76/INF.16 (ICS) containing information about an ICS report entitled 'Catalysing the Fourth Propulsion Revolution', which looked into different options to help decarbonize the global shipping fleet and highlighted the urgent need to accelerate research and development of zero-carbon technologies and fuels for maritime application in order to meet the GHG reduction targets set by the Initial IMO GHG Strategy.

7.71 In the ensuing discussion during which not all delegations were able to express their view due to time constraints, the following views, inter alia, were expressed:

- .1 international shipping's ability to meet the ambitions set out in the Initial IMO GHG Strategy as well as the Paris Agreement's temperature goals would require a fundamental shift to alternative low-carbon and zero-carbon fuels and technologies; therefore, the acceleration of R&D activities to develop alternative low-carbon and zero-carbon fuels should be encouraged;
- .2 the establishment of an international maritime R&D board would be a first but necessary step to support innovation and to accelerate the introduction of low-carbon and zero-carbon technologies and fuels for use in the international maritime sector, but would not incentivize behavioural change and therefore could not be categorized as an MBM;
- .3 the co-sponsors had taken into consideration most comments made by MEPC 75, as reflected in the revised submission;
- .4 to further support the decarbonization of shipping, the IMRB/IMRF could quickly support the delivery of field-proven technologies, which was a prerequisite for the further uptake and broad deployment of such technologies;
- .5 there was a need to support the large-scale deployment of alternative fuels and technologies in developing countries through effective transfer of technologies, capacity-building and technical cooperation within the maritime community; however, the proposed IMRB and its associated fund would not meet that need as it was designed to only support R&D but not the deployment or uptake of alternative fuels, and corresponding investments required in fuel production, port and bunkering infrastructures;
- .6 in line with UNFCCC and Green Climate Fund (GCF) principles, developing and developed countries from different geographic regions should be equally represented in the management of the IMRB;
- .7 this proposal would be essential to accelerate shipping's transition through decarbonization and the proposal should be finalized with a view to approval at MEPC 77;

- .8 while the proposal had certainly been improved since the last session, there still was no real incentive to create real demand for the uptake of low-carbon fuels, which would require a market-based measure;
- .9 the IMRB proposal did not include an appropriate mechanism to ensure equitable access to the required technology, fuels and ship designs and could increase the gap between those developed countries who owned the next generation technologies, and those developing countries who could not afford them and that, therefore, the transfer of technology had to be ensured;
- .10 the proposal was not properly specified in SMART terms (specific, measurable, achievable, realistic, time-bound);
- .11 the IMRF was a complex system and should be evaluated and compared with other proposals for mid- and long-term measures;
- .12 the Organization should look at alternative ways to generate funds to facilitate and finance technology transfer to developing countries, including possible complementary sources, such as cooperation with the Green Climate Fund (GCF);
- .13 the proposed IMRB, although not setting a price on carbon, could be a useful tool to accelerate the transition; however, it should not be considered in isolation but be included as part of the consideration of mid- and long-term measures to be conducted immediately after MEPC 76;
- .14 the provisions on intellectual property rights did not provide sufficient guarantees to ensure fair access to the results of research and development funded by the IMRB;
- .15 Member States' obligations for technology transfer should be governed by the resolution on *Promotion of technical cooperation and transfer of technology* (MEPC.229(65)) and fulfilled through IMO, not a subsidiary organ;
- .16 the IMRB would not introduce new international shipping rules and standards concerning the prevention and control of marine pollution from ships; therefore, setting up the IMRB through amendments to the MARPOL Convention would present significant legal challenges;
- .17 in order to move towards decarbonization of international shipping, the Organization should make careful use of its limited resources and prioritize the discussions on more far-reaching mid- and long-term measures;
- .18 it was questionable whether MEPC was best placed to provide oversight of the fund and how intellectual property be addressed;
- .19 alternative solutions such as voluntary contributions to an R&D trust fund should be further explored;
- .20 the proposed levy was well in the margin of daily fuel price fluctuations and would therefore not constitute any negative impacts on States;

- .21 given the lack of ambition in the agreed short-term measure, the next basket of measures should be much more ambitious than the IMRB in order to reach the levels of ambition of the Initial Strategy;
- .22 the proposed IMRB would provide a good complement to a future market-based measure and could be developed in parallel with future midterm measures;
- .23 the proposed IMRB was built upon a robust structure and went in the right direction, but its further consideration should take place in a structured manner as part of the work plan;
- .24 given the vast amount of R&D currently deployed in shipping's decarbonization, the IMRB was not needed; however, there was an urgent need for certainty on IMO's direction for future years;
- .25 the proposed IMRB could provide useful tools for future discussions on market-based measures;
- .26 the proposed levy would have severe negative impacts on developing countries and in accordance with the principles of CBDR-RC, the IMRB funds should be used to support developing States, in particular SIDS and LDCs;
- .27 nothing should be decided at this stage by the Committee regarding further consideration of the IMRB proposal because there had been no consensus on many issues; the priority should rather be given to the discussion on mid- and long-term measures;
- .28 the matter of CBDR-RC had already been adequately addressed by the Organization in the resolution on *Promotion of technical cooperation and transfer of technology* (MEPC.229(65)) and therefore no further discussion on funding models would be needed while also recalling that obligations in MARPOL were on ships and not on States; and
- .29 the proposed amendments to MARPOL Annex VI laying down the legal structure of the IMRB were solid and should be approved at MEPC 77 without any further delay.

7.72 Due to lack of time, the Committee could not finish the full consideration of the revised IMRB proposal and related commenting documents as not all delegations were able to express their views. Consequently, the Committee agreed that the discussion would be resumed at its next session.

7.73 The Committee noted statements by the delegations of Belgium, India and the United Arab Emirates as set out in annex 20.

Proposals on the development of mid- and long-term measures following up on the Initial IMO GHG Strategy and supporting working arrangements

7.74 The Committee had for its consideration the following documents containing proposals on the development of mid- and long-term measures following up on the Initial Strategy and supporting working arrangements falling into three distinct groups as set out below:

- .1 Proposal for a work plan for the development of mid- and long-term measures
 - .1 MEPC 76/7/10 (Australia et al.) proposing a work plan for the development of mid- and long-term GHG reduction measures in accordance with the Initial IMO Strategy and consisting of the following three phases:
 - .1 Phase I – Collation and initial consideration of proposals for measures;
 - .2 Phase II – Assessment and selection of measures(s) to further develop; and
 - .3 Phase III – Development of (a) measure(s) to be finalized within (an) agreed target date(s);

and suggesting that, to make the collation and initial consideration of proposals for measures possible, the work plan should identify key issues to be considered for each proposed mid-and long-term measure, including the main characteristics and features of the measure; identification of emissions reduction potential; potential implications for the shipping industry; implementation and enforcement aspects; legal aspects and indication of total workload for the Organization; and
 - .2 MEPC 76/7/61 (WWF et al.) commenting on document MEPC 76/7/10 and suggesting that the content of the work plan and timelines described in document MEPC 76/7/10 were not fully aligned with achieving the temperature goals of the Paris Agreement and keeping global warming below 1.5°C and to that purpose proposing amendments to the work plan.
- .2 Other proposals on the development of mid- and long-term measures and supporting working arrangements:
 - .1 MEPC 76/7/2 (Norway) setting out the following three concepts for a possible regulatory mechanism for the effective uptake of alternative low-carbon and zero-carbon fuels: a fuel CO₂/GHG limit; emission cap and trading; and carbon intensity indicators and credit trading/fleet averaging; and proposing that further development of these concepts should take place in a structured process established by the Committee in order to identify the desired regulatory mechanism;
 - .2 MEPC 76/7/9 (Australia et al.) containing a proposal for new working arrangements to accelerate discussions on various GHG-related work streams, in particular the establishment of a Standing Technical Group on Reduction of GHG Emissions from Ships (ST-GHG) to replace the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG) in the future;

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- .3 MEPC 76/7/11 (Belgium et al.) aiming to answer the questions raised at MEPC 75 regarding legal possibilities of IMO measures, in particular midterm (economic) measures; suggesting that the IMO Convention gave the IMO very broad objectives and powers to achieve them and contending that as long as IMO Member States agreed to a measure and it complied with IMO procedures, it would be valid; that the IMO Convention placed no restriction on IMO agreeing to measures that would raise money or set up an independent body to administer those funds; and proposing to reopen the debate on increasing the level of ambition in the IMO Strategy and that all further negotiations on measures would be conducted in the light of the suggested need for such revision of the Initial Strategy;
 - .4 MEPC 76/7/15 (Denmark et al.) outlining the importance of starting work on midterm GHG reduction measures that would incentivize the use of sustainable low-carbon and zero-carbon fuels in international shipping; arguing that the transition to sustainable low-carbon and zero-carbon fuels should start well before 2030 and that there was an imminent need for midterm measures to incentivize the use of these fuels; proposing criteria which the midterm measures should meet and suggesting measures to incentivize the use of low-carbon and zero-carbon fuels; and proposing a dedicated agenda item at ISWG-GHG on "the consideration of midterm measures aimed at incentivizing the use of sustainable low- and zero-carbon fuels" and a dedicated work stream on how to measure GHG emissions from alternative fuels and associated sustainability criteria;
 - .5 MEPC 76/7/39 (ICS et al.) proposing that the Committee should decide in principle to commence deliberations on mandatory MBMs; and suggesting that the Committee should commence discussions before 2023 with a view to considering key issues such as the development of principles as to how monies generated from MBMs should be used; and that the Committee should agree to allow consideration of different candidate measures, including short-term measures such as the IMRB/IMRF proposal and midterm measures such as MBMs, in parallel;
 - .6 MEPC 76/7/40 (Belgium) commenting on documents MEPC 76/7/2 (Norway), MEPC 76/7/11 and MEPC 76/INF.22 (Belgium et al.) and suggesting that the two proposed levies in documents MEPC 76/7/7 (Denmark et al.) and document MEPC 76/7/12 (Marshall Islands and Solomon Islands) were similar in the respect that no payments would be collected by States and no disbursements would be made by any State; that they were conceptually similar to the requirement of the International Convention on Civil Liability for Oil Pollution Damage (CLC) for certain ships to maintain insurance and that both of the levy proposals would create a separate entity that received and transmitted the fund; and concluding that the proposed levies could be adopted through the same legal pathways as suggested in document MEPC 76/7/11, such as, for example, a modification of MARPOL Annex VI;

- .7 MEPC 76/7/42 (Netherlands and OECD) commenting on document MEPC 76/7/15 (Denmark et al.) underlining the importance of starting work on midterm measures, in particular carbon pricing and/or fuel standards, by building on discussions held during two workshops on medium-term measures to decarbonize shipping, organized by the International Transport Forum at OECD and the Netherlands Ministry of Infrastructure and Water Management at the beginning of 2021; introducing three conceptual elements to help answer which midterm measures and in which sequence should be implemented: market failures, interdependencies and transition pathways; and suggesting commencing the consideration of midterm measures, with a priority on measures that could create a market for zero-carbon shipping namely carbon pricing and/or fuel standards at a significant stringency and with revenue to support deployment;
- .8 MEPC 76/7/60 (Pacific Environment) commenting on documents MEPC 76/7/7 (Denmark et al.) and MEPC 76/7/12 (Marshall Islands and Solomon Islands) and describing the general effects of a possible GHG levy and comparing these effects to those of alternative measures for the purpose of demonstrating that an ambitious GHG levy on ships would be a more effective stand-alone measure to raise revenue for shipping's low and zero-emission transition than a small fuel tax and a research and development fund; suggesting that there were economic opportunities created by a levy for the producers of low-carbon fuels and those involved in the retrofitting of ships; and concluding that the IMRB proposal would not achieve similar results to that of a significant GHG levy despite the marginally increased research, as no revenue would be available to support implementation and the slight cost increase would not create a market for new energy sources; and
- .9 MEPC 76/INF.22 (Belgium et al.) presenting a study on the legal basis of candidate IMO measures to reduce GHG emissions from ships which suggested that IMO would have the power to regulate the climate impacts of international shipping through the powers conferred on it by the IMO Convention; that IMO would have the authority to address climate issues; that none of IMO's powers would be limited to non-economic measures nor would the establishment of an independent body be prohibited; and that there would be no legal limits placed upon the use of the tacit procedure to amend existing Annexes to MARPOL.
- .3 Proposal on the establishment of a universal mandatory greenhouse gas levy
- .1 MEPC 76/7/12 (Marshall Islands and Solomon Islands) containing a proposal for a mandatory levy on GHG emissions from international shipping as an immediate priority measure with a view to incentivizing a rapid shift away from fossil fuel with the highest priority; proposing an entry level by 2025 of \$100 per tonne carbon dioxide equivalent on heavy fuel oil with upward ratchets in a five-yearly review cycle; and suggesting a formula for disbursement of monies raised and to reopen the debate on increasing the level of ambition required in the Revised Strategy;

- .2 MEPC 76/INF.21 (Marshall Islands) presenting a Sabin Center White Paper discussing the principles of international law that bear the Organization's authority to adopt an MBM to reduce GHG emissions and whether any of these principles provided a basis for IMO to allocate revenue generated by an MBM to SIDS and other States that were particularly vulnerable to climate change impacts. The main findings of this study are referenced in document MEPC 76/7/12 (Marshall Islands and Solomon Islands);
- .3 MEPC 76/INF.23 (Marshall Islands) presenting an initial impact assessment, prepared to accompany the proposal set out in document MEPC 76/7/12; discussing possible impacts of the proposed levy on States, including connectivity to markets, cargo value and type, transport dependency and costs, food security, disaster response, cost-effectiveness, and socio-economic progress and development; and suggesting that the primary impact of the levy would be positive in minimizing damages attributed to the impacts of climate change, and that its design would ensure that disproportionate negative impacts could be addressed; and
- .4 MEPC 76/INF.24 (Marshall Islands) presenting a literature review and analysis of available evidence suggesting supporting a 1.5°C compatible GHG price on international shipping; that any tax/levy should be advanced under the principle of polluter pays, that it should have a relatively high entry price from inception, and that the majority of revenue raised should be transferred to the globally well-established environmental funds as compensation to the most pressing mitigation and adaptation needs of the climate most vulnerable States.

7.75 The Committee noted that, due to the severe time constraints it was faced with, it was not possible to have a detailed consideration of the above-mentioned documents. However, considering that the proposals contained therein were important in assisting the Committee to progress its consideration of the mid- and long-term measures, the Committee had an initial consideration of these documents.

Proposal for a work plan for the development of mid- and long-term measures

7.76 The Committee noted that document MEPC 76/7/10 had been co-sponsored by a large number of Member States (22) representing both developed and developing States and various geographical regions, putting forward a concrete process on how to structure the Organization's discussion on mid- and long-term measures, including the consideration of impacts on States of candidate measures in three distinct phases.

7.77 In the ensuing discussion, all delegations that spoke supported the proposed work plan as a good starting point and an effective and transparent way forward to structure the Committee's future work on the development of mid- and long-term measures as well as to communicate the Organization's commitment to accelerate their consideration. Some of these delegations highlighted that the development of mid- and long-term measures was likely to entail complex technical, legal and economic considerations which would necessitate a structured approach.

7.78 In this context, several delegations highlighted the importance for the Organization to start immediately the consideration of concrete midterm measures, with a view to agreeing on ambitious measures, as soon as possible but no later than 2025 to be able to effectively reduce GHG emissions from international shipping as a matter of urgency and to enhance investment certainty for the industry.

7.79 Several delegations expressed the view that the work plan should be approved at this session so as to initiate concrete work on phase I immediately. Some of these delegations further argued, also referring to document MEPC 76/7/61 (WWF et al.), that the timelines set out in the work plan for phases II and III could be further tightened with a view to finalizing midterm measures, including possible market-based measures, by 2025. Some of these delegations stated further that, regardless of these timelines, the Committee could take any decision at the appropriate time, as these were just indicative.

7.80 The Committee noted an intervention by Argentina, supported by several other delegations, expressing support to organize future work on the basis of the work plan while proposing amendments to the work plan such that the assessment of impacts on States should be more prominent under phase II of the work plan and to also include a new phase IV to follow up on impacts on States.

7.81 The Committee noted an intervention by the observer of OCIMF referring to the outcome of the Correspondence Group on Possible Introduction of EEDI Phase 4 as set out in document MEPC 76/6 (Japan), which also contained a technological feasibility analysis of future technology and fuels which could be considered in the context of the work plan.

7.82 The Committee noted also an intervention by the observer of RINA emphasizing the need for the Organization to urgently initiate work on including the use of ammonia and hydrogen in the IGF Code; to recognize the use of batteries in the EEDI and EEXI guidelines; and to more prominently advocate the use of wind propulsion.

7.83 The Committee noted further an intervention by the observer of EUROMOT highlighting the need for regulatory certainty in planning investments in low-carbon technologies and fuels; that internal combustion engines were already capable of running on a wide range of alternative fuels but that incentives were needed to drive the uptake of zero-carbon fuels; and that the Organization should develop a well-to-wake approach to quantify GHG emissions from marine fuels.

7.84 With reference to the proposal to identify regulatory gaps regarding safety of alternative fuels in document MEPC 76/7/2 (Norway), the Committee noted the view by the observer of IACS, supported by a number of observers, regarding the need to account for the safety aspects of future measures, and IACS' proposal to reflect the assessment of the impacts of future measures on safety of ships in phase II of the work plan proposed in document MEPC 76/7/10 (Australia et al), and determine a mechanism to bring the action to the attention of the Maritime Safety Committee. Further, the observer of IACS informed the Committee that IACS had started work on the safety and environmental aspects associated with new energy-efficient technologies and alternative fuels, and planned to update relevant Committees of its progress.

7.85 Following consideration, the Committee approved the work plan as set out in annex 14, and requested ISWG-GHG 10 to use the work plan as a basis and as guidance for its further work on the consideration of concrete proposals for mid- and long-term measures. In this regard, operative paragraph 7 of resolution MEPC.328(76) was noted, and also that the work plan was to be applied in accordance with the Initial Strategy.

7.86 As requested, the statements made by the delegations of Belgium, Germany and India are set out in annex 20.

Other proposals on the development of mid- and long-term measures and supporting working arrangements

7.87 The Committee noted that documents MEPC 76/7/2 (Norway), MEPC 76/7/9 (Australia et al.), MEPC 76/7/11 (Belgium), MEPC 76/7/15 (Denmark et al.), MEPC 76/7/39 (ICS et al.), MEPC 76/7/40 (Belgium), MEPC 76/7/42 (Netherlands and OECD), MEPC 76/7/60 (Pacific Environment) and MEPC 76/INF.22 (Belgium et al.) contained various proposals with regard to the development of mid- and long-term measures and supporting working arrangements, including, inter alia, concepts for a regulatory mechanism for the uptake of alternative low-carbon and zero-carbon fuels; future GHG working arrangements, legal bases of candidate measures in MARPOL Annex VI; description of general effects of a possible GHG levy; and all underlining the importance of starting work on midterm GHG reduction measures as soon as possible.

7.88 In the ensuing discussion, different views were expressed by many delegations on the various proposals.

7.89 Several delegations expressed support for the proposals set out in document MEPC 76/7/2 (Norway) to develop measures that could meet the 2050 level of ambition in the Strategy, using the proposed possible concepts for a regulatory mechanism such as the CO₂/GHG limit and an emission cap and trading mechanism. However, some delegations expressed the view that the levy mechanism should also be considered as a possible regulatory mechanism.

7.90 Several delegations expressed support for the proposed future working arrangements on GHG-related matters as set out in document MEPC 76/7/9 (Australia et al.), including the proposed new Standing Technical Group on Reduction of GHG Emissions from ships and associated terms of reference, to enhance the Organization's efficiency in addressing GHG reduction from international shipping. However, several other delegations expressed the view that the proposal was premature and would require more detailed consideration, also taking into account any budgetary implications, which could also require review and approval by Council, as well as the impacts on smaller delegations of having multiple parallel work streams, and preferred to initiate work on the basis of the proposed work plan and to continue on the basis of the current intersessional working group and to consider any consequential changes to the working arrangements thereafter.

7.91 Several delegations further supported document MEPC 76/7/15 (Denmark et al.) in particular the inclusion of dedicated workstreams on the consideration of midterm measures aimed at incentivizing the use of sustainable low- and zero-carbon fuels and on how to measure GHG emissions from alternative fuels and on which sustainability criteria should apply in the terms of reference of ISWG-GHG 9 and the intersessional working group meetings thereafter.

7.92 Several delegations reiterated the importance of starting to work on midterm measures, notably possible market-based measures (MBMs), as soon as possible, also referring to documents MEPC 76/7/39 (ICS et al.) and MEPC 76/7/42 (Netherlands and OECD). Several delegations further advocated the importance of initiating concrete work on the revision of the Initial Strategy in 2021 to ensure a higher level of ambition. However, several other delegations expressed the view that this was premature and that the various proposals would require careful consideration. One delegation suggested that the Committee should invite Member States and international organizations to include appropriate experts (i.e. in renewable energy production, ports, etc.) in their delegation.

7.93 Following consideration, the Committee noted the support by many delegations for the various proposals for concepts, process and working arrangements to be further considered when developing midterm GHG reduction measures and to further consider these documents at ISWG-GHG 10 as part of dedicated workstreams on midterm measures and on GHG life-cycle assessments.

7.94 In conclusion, the Committee noted the various proposals contained in documents MEPC 76/7/2, MEPC 76/7/9, MEPC 76/7/11, MEPC 76/7/15, MEPC 76/7/39, MEPC 76/7/40, MEPC 76/7/42, MEPC 76/7/60 and MEPC 76/INF.22 and invited ISWG-GHG 10 to further consider these in the context of phase I of the work plan together with other future proposals.

Proposal on the establishment of a universal mandatory greenhouse gas levy

7.95 The Committee considered documents MEPC 76/7/12 (Marshall Islands and Solomon Islands), MEPC 76/INF.21, MEPC 76/INF.23 and MEPC 76/INF.24 (Marshall Islands) proposing, inter alia, an entry level mandatory levy of \$100 per tonne carbon dioxide equivalent on heavy fuel oil by 2025 and a formula for disbursement of monies raised, an initial impact assessment accompanying the proposal, a study on principles of international law and the adoption of a market-based mechanism for greenhouse gas emissions from shipping as well as a literature review and analysis of available evidence supporting a 1.5°C compatible carbon price on international shipping.

7.96 In the ensuing discussion, several delegations welcomed the proposal set out in document MEPC 76/7/12, and expressed support in principle for it, also recognizing the urgency of initiating discussions on concrete proposals for an MBM. Some of these delegations expressed support for the need to define a carbon price to provide a signal to the industry and energy providers and to generate funds to provide real support to SIDS and LDCs.

7.97 Notwithstanding, while recognizing the urgent need to develop a market-based measure, some delegations expressed the view that a levy would not necessarily be the most suitable basis for an MBM; that defining the exact amount of the levy would have to be subject to a cost-benefit analysis and impact assessment; that distribution of revenues would have to be further assessed; and that the proposal would have to be considered along with other proposals for an MBM under phase 1 of the work plan.

7.98 Some delegations opposed the proposed use of the Green Climate Fund, set up under UNFCCC, as a mechanism to collect and distribute funds, but instead expressed the view that such a mechanism should be kept under the auspices of IMO, in accordance with the principles of the IMO Convention, the MARPOL Convention and the Initial Strategy.

7.99 The delegation of Indonesia and several other delegations expressed the view that the proposal was premature and would have considerable negative impacts on the maritime trade serving developing States; that the universal nature of the levy was incompatible with the implementation of CBDR-RC; that there were no sufficient alternative low- or zero-carbon fuels available at this stage that ships could revert to; that possible impacts on States of the proposal would have to be assessed in more detail; other ways of incentivizing the use of low-carbon alternative fuels should be assessed equally; and that the proposal therefore should not be further considered at this stage.

7.100 In this context, the Committee noted statements by the delegations of the Cook Islands, Indonesia and Vanuatu concerning the need to properly address the negative impacts of the short-term measure and to define disproportionate negative impacts before entry into force of MARPOL Annex VI amendments. As requested, the statements are set out in annex 20.

7.101 Following consideration, the Committee noted the proposal for a market-based measure based on a mandatory carbon levy as set out in document MEPC 76/7/12 and the diverging views and concerns expressed regarding the proposal, in particular with regard to prejudging a discussion on main features and implications of possible midterm candidate GHG reduction measures.

7.102 The Committee agreed to further consider documents MEPC 76/7/12, MEPC 76/INF.21, MEPC 76/INF.23 and MEPC 76/INF.24, together with other future proposals for midterm measures, at ISWG-GHG 10 in the context of phase I of the work plan.

7.103 In this context, the Committee noted an intervention by Solomon Islands, supported by the delegations of Canada, Denmark, Finland, France, Germany, Ireland, Portugal, the Marshall Islands, the Netherlands, New Zealand, Sweden and Tuvalu, stating that in view of the considerable support for the proposal set out in document MEPC 76/7/12, including support to initiate consideration of market-based measures as soon as possible, the proposal in document MEPC 76/7/12 should be considered by ISWG-GHG 10 first instead of by MEPC 77.

7.104 In this context, the Committee also noted an intervention by Argentina, supported by the delegations of Brazil, China, Malaysia, South Africa and the United Arab Emirates, stating that many delegations expressed concern at market-based measures, due to their clear impact on developing countries, including the proposal as set out in document MEPC 76/7/12.

Matters deferred to MEPC 77

7.105 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of documents MEPC 76/7/1 (Norway), MEPC 76/7/17 (Republic of Korea), MEPC 76/7/22 (Denmark, France, Greece, Japan, Singapore and ICS), MEPC 76/7/31 (Comoros and RINA), MEPC 76/7/32 (India), MEPC 76/INF.30 (Comoros and RINA), MEPC 76/INF.31 (WWF), MEPC 75/7/7 (Norway), MEPC 75/7/10 (FOEI et al.), MEPC 75/INF.25 (FOEI et al.) and MEPC 75/INF.26 (Comoros) to MEPC 77.

8 FOLLOW-UP WORK EMANATING FROM THE ACTION PLAN TO ADDRESS MARINE PLASTIC LITTER FROM SHIPS

8.1 Owing to time constraints, the Committee agreed to defer the consideration of documents MEPC 76/8 and MEPC 75/8 (Secretariat), MEPC 75/8/1 and MEPC 75/8/2 (FAO), MEPC 75/8/3 (Singapore), MEPC 75/8/4 (Vanuatu), MEPC 75/8/5 (Secretariat), MEPC 75/INF.19 (Secretariat of the Basel Convention) and MEPC 75/INF.23 (Secretariat) to MEPC 77.

8.2 In this regard, the delegation of Vanuatu stated that consideration of the follow-up work emanating from the Action Plan to Address Marine Plastic Litter from Ships by MEPC 77 should be safeguarded when the arrangements for the next session of the Committee were developed in due course, taking into account that consideration of the documents under this agenda item had been deferred twice since MEPC 75.

9 POLLUTION PREVENTION AND RESPONSE

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

9.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 6 on agenda item 9) (refer also to the updated proposal by the Chair in paragraph 9 of document MEPC 76/1/1/Add.1), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 75/10/Add.1 (Secretariat), setting out the action requested of the Committee in connection with the remaining matters emanating from the seventh session of the PPR Sub-Committee (paragraphs 3.7 to 3.10, and 3.13 only); and
- .2 MEPC 76/9/7 (Secretariat), setting out the action requested of the Committee in connection with matters emanating from the eighth session of the PPR Sub-Committee (paragraphs 2.2 to 2.5 and 2.8 to 2.11 only).

9.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 2 to document MEPC 76/1/1, as modified by paragraph 9 of document MEPC 76/1/1/Add.1, as set out in the following paragraphs 9.3 to 9.10.

Actions to address marine plastic litter from ships

9.3 The Committee approved MEPC.1/Circ.893 on *Provision of adequate facilities at ports and terminals for the reception of plastic waste from ships* and MEPC.1/Circ.894 on *Sharing of results from research on marine litter and encouraging studies to better understand microplastics from ships*.

Procedures for PSC on the use of electronic record books

9.4 Having considered the outcome of PPR 7 in relation to the request by III 6 to the PPR Sub-Committee to further review the draft amendments to the *Procedures for port State control* on the use of electronic record books, as set out in annex 15 to document PPR 5/24, that had not been included in the *Procedures for port State control, 2019 (A.1138(31))* by III 6, the Committee:

- .1 endorsed the development of interim guidance for surveyors, including a sample form, to facilitate the endorsement of a cargo operation in an electronic Cargo Record Book; and
- .2 noted that PPR 7 had invited III 7 to develop the interim guidance and to consider whether there was a need to incorporate the guidance in the next revision of the *Procedures for port State control*.

Unified interpretations to the NO_x Technical Code 2008

9.5 The Committee approved MEPC.1/Circ.895 on *Unified interpretations to the NO_x Technical Code 2008, as amended*.

Guidelines for port State control under MARPOL Annex VI

9.6 The Committee noted that PPR 7 had invited III 7 to review document PPR 7/2/5 (IMarEST), with a view to developing appropriate amendments to the *2019 Guidelines for port State control under MARPOL Annex VI chapter 3* (resolution MEPC.321(74)) to include provisions relating to chapter 4 of MARPOL Annex VI.

Safety and pollution hazards of chemicals

GESAMP/EHS 57

9.7 The Committee noted the outcome of GESAMP/EHS 57 and that the full report from the meeting, together with the revised GESAMP Composite List, had been disseminated as PPR.1/Circ.8.

Evaluation of products and cleaning additives

- 9.8 With regard to the categorization of liquid substances, the Committee:
- .1 concurred with the evaluation of products and their respective inclusion in lists 1, 3 and 5 of MEPC.2/Circ.26 (issued on 1 December 2020), with validity for all countries and with no expiry date;
 - .2 noted that for three products already listed in chapter 17 of the IBC Code that were subsequently reassessed by ESPH 26, namely "Creosote (coal tar)", "Sodium chlorate solution (50% or less)", and "Ethyl tert-butyl ether", a distinguishing qualifier was appended to the corresponding product names in list 1 of MEPC.2/Circ.26 to facilitate shipment of the products with the updated carriage requirements;
 - .3 noted that information regarding the reassessment of existing products and the use of a distinguishing qualifier was included in section 3 of the MEPC.2 circular on *Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code*, starting from MEPC.2/Circ.26;
 - .4 concurred with the evaluation of cleaning additives and their inclusion in annex 10 of MEPC.2/Circ.26; and
 - .5 endorsed the establishment of a generic entry for "Palm oil mill effluent (POME) technical oil" in list 1 of the MEPC.2 circular on *Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code*, with validity for all countries, without an expiry date.

Mitigation measures to reduce risks of use and carriage for use of heavy fuel oil as fuel by ships in Arctic waters

- 9.9 With regard to the draft guidelines on mitigation measures to reduce risks of use and carriage for use of heavy fuel oil (HFO) as fuel by ships in Arctic waters (PPR 8/6, annex 2) being developed by the PPR Sub-Committee, the Committee noted that PPR 7 had requested:
- .1 the NCSR Sub-Committee to review section 2 (Navigational measures) and section 5 (Communication) of the draft guidelines;
 - .2 the SDC Sub-Committee to review paragraph 4.4 of the draft guidelines, concerning the location of fuel tanks; and
 - .3 the HTW Sub-Committee to review section 7 (Familiarization, training and drills),

with a view to advising PPR 9 of the outcome of their consideration.

MATTERS DEFERRED TO MEPC 77

- 9.10 Owing to time constraints, the Committee agreed to defer to MEPC 77 consideration of the following:
- .1 paragraphs 2.19 and 2.20 of document MEPC 75/10 (Secretariat), together with documents MEPC 75/10/2 (United States), MEPC 75/10/3 (IACS), MEPC 76/9/3 (Republic of Korea), and MEPC 76/9/4 (China), regarding the draft 2020 guidelines for exhaust gas cleaning systems;

- .2 paragraphs 2.21 to 2.23 of document MEPC 75/10, together with documents MEPC 75/10/5 (CLIA), MEPC 75/INF.10 (Sweden), MEPC 75/INF.13 (Greece), MEPC 76/9/1 (ICES), MEPC 76/9/2 (Austria et al.), MEPC 76/9/6 (Japan), MEPC 76/9/8 (FOEI et al.), MEPC 76/INF.5 (ICES), MEPC 76/INF.11 (Belgium), MEPC 76/INF.33 (Japan), MEPC 76/INF.38 (Cyprus) and MEPC 76/INF.42 (China), regarding the title and scope of work of output 1.23 concerning discharge water from exhaust gas cleaning systems;
- .3 paragraph 3.4 of document MEPC 75/10/Add.1 (Secretariat) and paragraphs 2.6 and 2.7 of document MEPC 76/9/7 (Secretariat), together with documents MEPC 75/5/4 (FOEI et al.), MEPC 75/5/5 (FOEI et al.), MEPC 75/5/6 (ICS), MEPC 75/5/7 (IPIECA and IBIA), MEPC 75/10/6 (FOEI et al.), MEPC 76/5 (ISO), MEPC 76/9/9 (FOEI et al.), MEPC 76/9/10 (Greenpeace International et al.), MEPC 76/INF.43 (China), MEPC 76/INF.44 (China), and MEPC 76/INF.45 (China), concerning the output on reduction of the impact on the Arctic of Black Carbon emissions from international shipping;
- .4 paragraph 3.6 of document MEPC 75/10/Add.1, together with documents MEPC 75/10/4 (IACS) and MEPC 76/9/5 (INTERTANKO), concerning the review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book;
- .5 paragraph 3.12 of document MEPC 75/10/Add.1 regarding the output proposed in document MEPC 74/14/4 (Norway); and
- .6 document MEPC 76/9 (Secretariat) on draft amendments to MARPOL Annex II.

10 REPORTS OF OTHER SUB-COMMITTEES

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

Outcome of III 6

10.1 In accordance with the updated arrangements of the remote session, as outlined in document MEPC 76/1/1/Add.1 (paragraphs 14 and 15), the Committee considered by correspondence, prior to the virtual meeting, paragraphs 4.3 and 4.5 of document MEPC 75/11/1 (Secretariat), deferred from MEPC 75, setting out the action requested of the Committee in connection with the sixth session of the Sub-Committee on Implementation of IMO Instruments (III 6), with regard to two proposed new outputs. In this regard, the Committee noted that MSC 103 had agreed to include the two new outputs in the biennial agenda of the III Sub-Committee for 2022-2023 and the provisional agenda for III 8, with a target completion year of 2023, subject to concurrent decision by MEPC. The new outputs were on "Development of an entrant training manual for PSC personnel" and on "Development of guidance in relation to IMSAS to assist in the implementation of the III Code by Member States", respectively (MSC 103/WP.1/Rev.1, paragraphs 18.35 to 18.38).

10.2 During the virtual meeting, the Committee reconfirmed the endorsement of the Chair's proposals in paragraph 15 of document MEPC 76/1/1/Add.1, and agreed to include in the biennial agenda of the III Sub-Committee for 2022-2023 and the provisional agenda for III 8 an output on "Development of an entrant training manual for PSC personnel" and an output on "Development of guidance in relation to IMSAS to assist in the implementation of the III Code by Member States", both with a target completion year of 2023.

MATTERS DEFERRED TO MEPC 77

Outcome of SDC 7

10.3 The Committee noted that, in accordance with document MEPC 76/1/1, paragraph 11.6 and annex 1, it would consider during the virtual meeting, under this agenda item, the outcome of SDC 7 (MEPC 76/10), which would entail the approval of amendments to MARPOL Annex I and, concurrently with the MSC, to the IBC Code, regarding watertight doors on cargo ships. However, in accordance with the updated arrangements of the remote session, as outlined in document MEPC 76/1/1/Add.1 (paragraph 12), the Committee also noted that MSC 103 had deferred the adoption of the related amendments to the 1988 Load Lines Protocol and the IGC Code to MSC 104, and had invited further relevant submissions (MSC 103/WP.1/Rev.1, paragraphs 3.19 and 3.33). In light of the above, and considering that the amendments were identical across all four instruments (MARPOL Annex I, 1988 Load Lines Protocol, and the IBC and IGC Codes), the Committee endorsed the Chair's proposal and agreed to defer the consideration of this matter to MEPC 77, taking into account the relevant outcome of MSC 104.

Process of updating the HSSC

10.4 The Committee recalled that, having noted that A 31 had invited MSC 102 and MEPC 75 to consider the proposals made in document A 31/10/2 (Germany et al.) on the process of updating the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), with a view to taking action as appropriate, and that MSC 102 had postponed consideration of this matter to MSC 103, MEPC 75 had also agreed to postpone consideration of this matter to this session. However, in accordance with the updated arrangements of the remote session, as outlined in document MEPC 76/1/1/Add.1 (paragraph 13), the Committee also noted that MSC 103 had further postponed the consideration of its relevant agenda item to MSC 104 (MSC 103/WP.1/Rev.1, paragraph 2.1); therefore, the Committee endorsed the Chair's proposal and agreed to defer the consideration of this matter to MEPC 77 taking into account the relevant outcome of MSC 104.

11 TECHNICAL COOPERATION ACTIVITIES FOR THE PROTECTION OF THE MARINE ENVIRONMENT

11.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 8 on agenda item 11), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 76/11 (Secretariat), providing an update on the activities implemented under the IMO Integrated Technical Cooperation Programme (ITCP) from 1 January to 31 December 2020 and the Thematic Priorities for the ITCP for the 2022-2023 biennium; and
- .2 MEPC 76/11/1 (REMPEC), providing an update from REMPEC for the period from 1 January to 31 December 2020.

11.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 2 to document MEPC 76/1/1, as set out in the following paragraphs 11.3 to 11.5.

Update on activities under the ITCP

11.3 The Committee noted the information provided in documents MEPC 76/11 (Secretariat) and MEPC 76/11/1 (REMPEC) on the activities related to protection of the marine

environment under IMO's Integrated Technical Cooperation Programme (ITCP) and on activities implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), respectively, in 2020.

11.4 The Committee approved the revised thematic priorities related to the marine environment, as set out in annex 2 to document MEPC 76/11 (Secretariat).

11.5 The Committee endorsed the reinstatement of a dedicated global programme on reducing atmospheric emissions from ships and in ports, and effective implementation of IMO's Initial GHG Strategy, for inclusion under the ITCP for the 2022-2023 biennium.

12 WORK PROGRAMME OF THE COMMITTEE AND SUBSIDIARY BODIES

Proposals for new output

12.1 The Committee took into account the provisions of the Committees' Method of Work (MSC-MEPC.1/Circ.5/Rev.2) and of the *Application of the Strategic Plan of the Organization* (resolution A.1111(30)) when assessing the proposals for new outputs.

Reduction of underwater noise from commercial shipping

12.2 The Committee had for its consideration the following documents in relation to the reduction of underwater noise from commercial shipping:

- .1 MEPC 75/14 (Australia et al.), proposing a new output to undertake a review of the 2014 *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* (MEPC.1/Circ.833) (2014 Guidelines) and identify next steps;
- .2 MEPC 76/12 (International Whaling Commission), in support of the proposal for a new output concerning a review of the 2014 Guidelines and identification of next steps, providing comments on document MEPC 75/14 and information on new activities of IWC since the summary of new information on impacts of underwater noise on marine life that IWC submitted in 2018 (MEPC 72/INF.9);
- .3 MEPC 76/12/1 (ACOPS), providing comments on document MEPC 75/14, supporting the proposed new output on underwater noise and emphasizing the pressing nature of the issue and the ongoing work in other international bodies that can be leveraged;
- .4 MEPC 76/12/2 (Germany and WWF), providing comments on document MEPC 75/14 and drawing attention to recent research findings submitted to and welcomed by the Arctic Council's Working Group on the Protection of the Arctic Marine Environment (PAME), which showed, inter alia, a dramatic increase in underwater noise pollution in the Arctic;
- .5 MEPC 76/INF.17 (Belgium), providing summaries of the key findings of two desk studies carried out in 2020 on options for reducing emissions as well as underwater radiated noise from marine traffic, which focused on the Belgian shipping fleet and the effects of slow steaming for such reduction in a realistic scenario of marine traffic in the North Sea, respectively;

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- .6 MEPC 76/INF.32 (India), putting in perspective the issue of acoustic habitat degradation in the Indian Ocean Region (IOR) with identification of hotspots in terms of the extent of degradation, proposing new means for site-specific assessment of the degradation, and drawing attention to the Underwater Domain Awareness (UDA) framework and the Underwater Radiated Noise (URN) management;
 - .7 MEPC 76/INF.39 (Netherlands), summarizing the results of the Joint Monitoring Programme of Ambient Noise in the North Sea (JOMOPANS), a programme developing a framework for a fully operational joint monitoring programme for ambient noise in the North Sea and producing maps of depth-averaged sound pressure levels for the North Sea;
 - .8 MEPC 75/14/1 (FOEI et al.), providing comments on document MEPC 75/14 and drawing attention to the worldwide impact of underwater noise on the marine environment, the urgency of the issue, the lack of activity to date and to expressions of support for mitigation measures from international forums and civil society;
 - .9 MEPC 75/14/2 (Austria et al.), providing comments on document MEPC 75/14, expressing general support for the proposed new output and presenting all the initiatives taken at the European level to limit underwater noise pollution from ships and its impact on the marine environment and species;
 - .10 MEPC 75/14/3 (World Maritime University), providing comments on document MEPC 75/14 and information on the International Symposium on Anthropogenic Underwater Noise, which took place in Hamburg, Germany, in September 2019 and was organized by the Jens-Peter and Betsy Schlüter Foundation for Shipping and Environmental Protection and the World Maritime University (WMU) with the support of IMO;
 - .11 MEPC 74/17/2 (Canada and France), highlighting various international efforts undertaken to address and further understand adverse underwater noise from commercial shipping, and pointing out that the need for further research on new technical solution and continued international collaboration is necessary to ensure that the balance between a healthy ocean and its uses is sustainably met;
 - .12 MEPC 74/17/3 (FOEI et al.), providing comments on document MEPC 74/17/2 and drawing attention to the worldwide impact of underwater noise on the marine environment, the urgency of the issue, and to expressions of support for mitigation measures from international forums and civil society, and encouraging Member States to bring forward a proposal for a new work output on underwater noise to MEPC 75 for consideration;
 - .13 MEPC 74/INF.14 (CMS), providing information on UNEP/CMS/Resolution 12.14 on Adverse Impacts of Anthropogenic Noise on Cetaceans and Other Migratory Species, adopted by the Conference of the Parties at its 12th Meeting in Manila, in October 2017, in relation to shipping traffic;

- .14 MEPC 74/INF.28 (Canada), highlighting a recent review of underwater radiated noise mitigation measures from ships, presented as a technical matrix focusing on new builds and retrofit technologies; and
- .15 MEPC 74/INF.36 (Canada), highlighting the recommendations and outcomes from a recent international technical workshop on underwater vessel noise, titled "Quieting Ships to Protect the Marine Environment",

together with the Chair's preliminary assessment of the proposal (MEPC 76/WP.2, annex 2).

12.3 Following consideration, the Committee:

- .1 agreed to include in the biennial agenda of the SDC Sub-Committee for 2022-2023 and the provisional agenda for SDC 8 an output on "Review of the 2014 Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833) (2014 Guidelines) and identification of next steps", with a target completion year of 2023;
- .2 approved the terms of reference for the SDC Sub-Committee on this new output, as set out in annex 2 to document MEPC 75/14;
- .3 having highlighted that underwater vessel noise derived from various sources, which included, inter alia, hull noise, propeller noise, machinery noise and sonar, invited Member States and international organizations to include relevant experts in their delegations to the SDC Sub-Committee for the work of the new output;
- .4 invited Member States and international organizations to submit their concrete proposals to SDC 8; and
- .5 requested the Secretariat to discuss with potential donors, such as GEF, regarding the potential funding of a global underwater vessel noise project.

12.4 The delegation of India referred to the information contained in document MEPC 76/INF.32 and expressed the view that the scope of the new output should also include the monitoring of the impact of underwater noise from shipping to ascertain the efficacy of various solutions. In this regard, the Committee reiterated its invitation to Member States and international organizations to submit information and concrete proposals to the SDC Sub-Committee.

New outputs proposed by the III Sub-Committee

12.5 The Committee recalled that under agenda item 10 it had concurred with the decisions made and action taken by MSC 103, i.e. the inclusion of new outputs on "Development of an entrant training manual for PSC personnel" and "Development of guidance in relation to IMSAS to assist in the implementation of the III Code" in the biennial agenda of the III Sub-Committee and the provisional agenda for III 8.

Biennial agenda of the PPR Sub-Committee and provisional agenda for PPR 9

12.6 The Committee noted the biennial status report of the PPR Sub-Committee for the 2020-2021 biennium, as set out in annex 3 to document PPR 8/13, and approved the biennial agenda for the 2022 to 2023 biennium of the PPR Sub-Committee and the provisional agenda for PPR 9, as set out in annexes 15 and 16, respectively.

Status of outputs of the Committee for the 2020-2021 biennium

12.7 The status of outputs for the 2020-2021 biennium and the post-biennial agenda of MEPC, as prepared by the Secretariat taking into account the outcome of the meeting, are set out in annexes 17 and 18, respectively.

Scheduling of upcoming sessions and items to be included in the agenda of MEPC 77

12.8 Having considered document MEPC 76/WP.3 and taken into account the decisions made at this session, the Committee:

- .1 noted that MEPC 77 had been tentatively scheduled to take place from 8 to 12 November 2021, as indicated in document PROG 129/Rev.1, and that MEPC 78 was expected to take place in the first half of 2022;²
- .2 approved the items to be included in the agenda for MEPC 77, as set out in the annex to document MEPC 76/WP.3;
- .3 agreed that the Chair would issue a document prior to MEPC 77, setting out the proposals by the Chair with regard to arrangements for the session; and
- .4 encouraged Member States and international organizations to take into account the heavy workload of the Committee when considering submitting new documents to MEPC 77.

12.9 Several delegations remarked that the dates on which MEPC 77 was due to take place overlapped with the second week of the 26th United Nations Climate Change Conference (COP 26); expressed concern that this clash in dates would negatively impact the ability of delegations to MEPC to contribute to the deliberation of the Committee due to relevant experts having to choose between participating in MEPC 77 or COP 26; and urged the Secretariat to review the programme of meetings for 2021 with a view to resolving this clash. The delegation of the United Arab Emirates encouraged the IMO and IMSO Secretariats to explore the option of shifting the IMSO Advisory Committee to take place from 8 to 12 November 2021 and scheduling MEPC 77 to take place from 15 to 19 November 2021. In this context, the Committee was informed by the Secretariat that the next session of the Council (C 125) would decide on the modality for the thirty-second session of the Assembly and, depending on whether the Council decided on A 32 being a remote or physical session, there could be some flexibility in rescheduling MEPC 77 so as to avoid conflicting with the dates on which COP 26 was due to take place once C 125 had considered the matter. The delegation of Tuvalu also recommended that consideration be given to starting virtual meetings at an earlier time of day. In conclusion, the Committee, having agreed to the five-day duration for MEPC 77, requested the Secretariat to consider possible adjustments to the dates of MEPC 77 and to inform delegations of any such adjustments through the circular letter for MEPC 77, taking into account comments expressed in plenary.

² The Committee is invited to note that, following consideration by C 125, MEPC 77 was subsequently rescheduled to take place from 22 to 26 November 2021.

12.10 With regard to the preliminary programme of meetings for 2022, the Committee noted that it was not yet available. Meeting dates for 2022 were expected to be published shortly after C 125 in July 2021.

Items to be included in the agenda of MEPC 77

12.11 The final list of items to be included in the provisional agenda for the Committee's next session, as prepared by the Secretariat in consultation with the Chair, is set out in annex 19.

12.12 The Committee noted the statements by the observers from CSC and FOEI (on behalf of FEOI, WWF and Greenpeace International) in regard to, inter alia, the outcome of this session in relation to the reduction of GHG emissions from ships, the impact on the Arctic of Black Carbon emissions from international shipping, and the practice of giving the floor to non-governmental organizations in consultative status with IMO only after all Member States had made their comments. As requested, the text of the statements made by the observers from CSC and FOEI is set out in annex 20. In this context, the delegations of Tuvalu and Solomon Islands expressed their support for the above-mentioned statements in regard to Black Carbon emissions and, in the case of Solomon Islands, in regard to the Committee considering the verbal contributions by non-governmental organizations more promptly.

Dates and duration of MEPC 76

12.13 The Committee recalled that under agenda item 1 it had endorsed the Chair's proposal on the arrangements and duration for this remote session as set out in documents MEPC 76/1/1 (Chair). In this connection, having taken into account the concern raised by the Russian Federation (MEPC 76/1/1/Add.1, paragraphs 3 and 4, and annex 1), the Committee highlighted the following:

- .1 owing to concerns raised and in order to maintain the integrity of the report of the Committee, document MEPC 75/18/Corr.1 was issued to modify the dates and duration of MEPC 76 as described in the report of MEPC 75 (MEPC 75/18), i.e. from 10 to 17 June 2021 to 14 to 18 June 2021, since there was no decision at MEPC 75 to change the tentative dates of MEPC 76 that were announced during the virtual meeting of MEPC 75;
- .2 it was of paramount importance to strictly follow procedures and practices to conduct the Committee appropriately;
- .3 at the same time, having considered the number of documents submitted to MEPC 76, as well as many documents deferred from previous sessions, and taking into account the difficulty of conducting remote sessions and the urgent matters needed to be considered at MEPC 76, the Chair proposed a one-day extension to the five-day duration of MEPC 76, i.e. 10 to 17 June 2021;
- .4 the Committee concurred with the Chair's proposal (MEPC 76, from 10 to 17 June 2021), on the condition that the Chair's proposal was made as an exceptional case under the difficult COVID-19 pandemic circumstances, which should not create a precedent for this Committee or any other IMO organ or body;
- .5 the Committee also noted that the Chair's proposal was based on the confirmation of the Secretariat that the budget implication for the proposed extension relating to the interpretation and meeting platform was being covered under the current budgetary provisions and following careful management of the meeting costs related to the programme of meetings for 2021; and

- .6 C 125 would be invited to consider and endorse this course of action, together with relevant information provided in document MEPC 76/1/1 (paragraphs 2 to 9).

Commenting documents on deferred documents from previous sessions

12.14 With regard to whether documents commenting on those documents deferred from previous sessions could be submitted by 21 April 2021 (seven-week deadline for MEPC 76), the Committee considered the comments by Japan set out in annex 2 to document MEPC 76/1/1/Add.1. Having taken into account the practice of MSC 103 (MSC 103/1, Notes 1.3), the Committee agreed that documents (four pages or less) commenting on documents deferred from previous sessions of the Committee would be accepted by the seven-week deadline for MEPC 77 and future sessions.

12.15 In this regard, the delegation of Japan emphasized that any rules set out in the official documents, including the Committees' method of work, should be strictly complied with. In particular, in this context, the role of the Secretariat was very important to ensure fairness and transparency in the enforcement of such rules.

12.16 The delegations of the Bahamas, Brazil, China and the Republic of Korea also expressed their support for the principle of maintaining the clarity of the deadline for documents commenting on those deferred from previous sessions. The delegation of Brazil added that it was important for the documents produced by the Secretariat to be clear on the procedures to be followed without leaving room for interpretation.

12.17 The delegation of the Bahamas expressed its appreciation to the Secretary-General and the entire Secretariat for the support that they provided to the IMO membership and, recognizing the pressures and limitations being faced by the Secretariat in preparing for committee and sub-committee sessions during the COVID-19 pandemic, encouraged Member States to be as helpful as possible.

12.18 In the context of transparency, the delegation of the Republic of Korea noted that document MEPC 76/5/5 had been republished on IMODOCs on 12 May 2021 with a footnote on the first page indicating the changes that had been introduced relative to the previous version of the document. In this regard, the delegation of the Republic of Korea was of the view that in cases where modifications had to be made to documents that had already been published on IMODOCs, having the modifications issued in the form of corrigenda, rather than replacing the document in question with a revised version, would ensure that the changes were brought to the attention of all Member States and international organizations and would avoid potential misunderstandings or misinterpretations of the proposals or comments contained in those documents.

Correspondence groups

12.19 The Committee recalled that it had decided under agenda item 7 to establish the Correspondence Group on Carbon Intensity Reduction and agreed to relax the deadline for submission of the interim report of the Correspondence Group to MEPC 77 to the nine-week document submission deadline (Friday, 17 September 2021).

Intersessional meetings

12.20 Having taken into account the progress and decisions made at this session in relation to reduction of GHG emissions from ships under agenda items 3 and 7, the Committee considered the scheduling of future sessions of the Intersessional Working Group on

Reduction of GHG Emissions from Ships (ISWG-GHG) in 2021. In this context, the Committee had for its consideration the relevant parts of the report of ISWG-GHG 8 (MEPC 76/WP.4, paragraphs 93 to 97 and 100.14), including the discussions of ISWG-GHG 8 on the possibility of ISWG-GHG 9 being divided into two parts, a first part lasting three days in the week 13 to 17 September 2021 and a second part lasting five days from 18 to 22 October 2021 (MEPC 76/WP.4, paragraph 93).

12.21 In the ensuing discussion, the Committee recognized the heavy workload of ISWG-GHG and concluded that the holding of two separate ISWG-GHG sessions, each with a distinct set of terms of reference and submission deadlines, was preferable to a single session divided into two temporally non-contiguous parts. Consequently, the Committee approved, subject to endorsement by the Council, the holding of the ninth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 9) from 15 to 17 September 2021 and of the tenth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 10) from 18 to 22 October 2021.

12.22 The Committee agreed to the following terms of reference for ISWG-GHG 9:

"The Intersessional Working Group on Reduction of GHG Emissions from Ships is instructed, taking into account documents submitted to ISWG-GHG 9, relevant documents submitted to ISWG-GHG 7, and documents MEPC 76/INF.69 and MEPC 76/INF.70 (Brazil) to:

- .1 further consider concrete proposals to encourage the uptake of alternative low-carbon and zero-carbon fuels, including the development of life cycle GHG/carbon intensity guidelines for all relevant types of fuels and incentive schemes, as appropriate;
- .2 further consider concrete proposals to reduce methane slip and emissions of volatile organic compounds (VOCs); and
- .3 submit a written report to MEPC 77."

12.23 For ISWG-GHG 10, the Committee agreed to the following terms of reference:

"The Intersessional Working Group on Reduction of GHG Emissions from Ships is instructed, taking into account documents submitted to ISWG-GHG 10 and relevant documents deferred from previous ISWG-GHG sessions, the interim report of the Correspondence Group on Carbon Intensity Reduction and any commenting documents submitted to MEPC 77, to:

- .1 consider any issue arising from the interim report of the Correspondence Group on Carbon Intensity Reduction;
- .2 further consider the scope of and timeline for development of a mandatory carbon intensity code;
- .3 consider concrete proposals on how to keep the impacts of the short-term measure under review and how to undertake a lessons-learned exercise of the comprehensive impact assessment of the short-term measure;*

- .4 consider midterm GHG reduction measures in the context of Phase I of the work plan for the development of mid- and long-term measures, also taking into account documents MEPC 76/7/2 (Norway), MEPC 76/7/9 (Australia et al.), MEPC 76/7/11 (Belgium et al.), MEPC 76/7/12 (Marshall Islands and Solomon Islands), MEPC 76/7/15 (Denmark et al.), MEPC 76/7/39 (ICS et al.), MEPC 76/7/40 (Belgium), MEPC 76/7/42 (Netherlands and OECD), MEPC 76/7/60 (Pacific Environment) and MEPC 76/INF.22 (Belgium et al.); and
 - .5 submit a written report to MEPC 77.
- * Reference is made to operative paragraph 7 of resolution MEPC[...] (76) on the adoption of amendments to MARPOL Annex VI."

12.24 The Committee also approved the holding of an intersessional meeting of the ESPH Technical Group in 2022, subject to the endorsement of the Council.

13 ANY OTHER BUSINESS

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

13.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 76/1/1 (paragraphs 14 to 17) and its annex 2 (section 9 on agenda item 13), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 76/13 (World Coatings Council), providing a set of recommendations to include specific risk assessment criteria to support the decision-making process for adding an anti-fouling system to Annex 1 to the AFS Convention;
- .2 MEPC 76/13/2 (BIMCO and ICS), providing information on an industry standard on in-water cleaning with capture and suggesting that it be included in the review of the Biofouling Guidelines;
- .3 MEPC 76/INF.29 (Secretariat), providing a status report on FSO SAFER and the work carried out by the Secretariat to date;
- .4 MEPC 76/INF.63 (REMPEC), providing information on the adoption and implementation of a road map for the possible designation of the Mediterranean Sea as an Emission Control Area for Sulphur Oxides pursuant to MARPOL Annex VI; and
- .5 MEPC 76/INF.65 (FOEI), providing information on a report describing IMO food waste regulation and possible reforms and amendments.

13.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 2 to document MEPC 76/1/1, as set out in the following paragraphs 13.3 to 13.7.

Risk assessment of anti-fouling systems

13.3 The Committee noted the information and comments in document MEPC 76/13 (World Coatings Council) on specific risk assessment criteria which could be used to decide on the merits of placing an anti-fouling system in Annex 1 to the AFS Convention, and agreed that, should interested Member States wish to pursue the matter further, a proposal for a new output would need to be submitted to a future session of the Committee.

Industry standard on in-water cleaning with capture

13.4 The Committee instructed the PPR Sub-Committee to consider document MEPC 76/13/2 (BIMCO and ICS), under agenda item 7 (Review of the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (resolution MEPC.207(62))), and to advise the Committee accordingly.

Status report on FSO SAFER

13.5 The Committee noted the status report on FSO SAFER and the work carried out by the Secretariat to date, provided in document MEPC 76/INF.29 (Secretariat).

Possible designation of the Mediterranean Sea as an ECA for Sulphur Oxides

13.6 The Committee noted the information on the adoption and implementation of a road map for the possible designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides pursuant to MARPOL Annex VI, within the framework of the Barcelona Convention, provided in document MEPC 76/INF.63 (REMPEC).

Food waste regulation

13.7 The Committee noted the information in document MEPC 76/INF.65 (FOEI) on a report describing IMO food waste regulation and possible reforms and amendments.

MATTERS DEFERRED TO MEPC 77

13.8 As proposed in document MEPC 76/1/1 (annex 3), the Committee agreed to defer the consideration of document MEPC 76/13/1 (World Coatings Council) to MEPC 77.

14 CONSIDERATION OF THE REPORT OF THE COMMITTEE

14.1 The draft report of the Committee (MEPC 76/WP.1) was prepared by the Secretariat, in consultation with the Chair, and considered by the Committee during the virtual meeting held on 17 June 2021. Subsequently, the Secretariat, in consultation with the Chair, prepared and published on IMODOCS the final draft report (MEPC 76/WP.1/Rev.1) incorporating the changes to document MEPC 76/WP.1 that had been agreed during its consideration in the virtual meeting. Thereafter, delegations wishing to comment on the final draft report were given a deadline of 30 June, 23:59 (UTC+1), to do so by correspondence in accordance with paragraph 21 of *the Interim guidance to facilitate remote sessions of the Committees during the COVID-19 pandemic (MSC-LEG-MEPC-TCC-FAL.1/Circ.1)*.

14.2 After the resolution of comments received, as described in document MEPC 76/14, the report of the Committee was finalized by the Secretariat in consultation with the Chair. The session was closed at 23.59 (UTC+1) on 30 June 2021.

15 ACTION REQUESTED OF OTHER IMO ORGANS

15.1 The Council, at its 125th session, is invited to:

- .1 consider and endorse the Committee's course of action concerning the extension of the duration of MEPC 76, taking into account relevant information provided in document MEPC 76/1/1 (paragraphs 1.11, 1.12 and 12.13);

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- .2 consider the Secretariat support for the Organization's work on GHG emissions reduction with a view to making the necessary additional budget allocation for the next biennium of 2022-2023 for recruiting two additional professional officers in the Air Pollution and Energy Efficiency Section of the Marine Environment Division (paragraphs 7.37 to 7.40);
 - .3 note that the Committee, having agreed to the five-day duration for MEPC 77, requested the Secretariat to consider possible adjustments to the dates of MEPC 77 and to inform delegations of any such adjustments through the circular letter for MEPC 77 (paragraphs 12.8 and 12.9); and
 - .4 endorse the holding of three intersessional meetings (paragraph 12.20 to 12.24).

15.2 The Council, at its thirty-fourth extraordinary session, is invited to:

- .1 consider the report of the seventy-sixth session of MEPC and, in accordance with Article 21(b) of the IMO Convention, transmit it, with any comments and recommendations, to the thirty-second session of the Assembly;
- .2 note that the Committee adopted amendments to MARPOL Annexes I, IV and VI and the AFS Convention, including the adoption of 2021 revised MARPOL Annex VI, introducing mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping (section 3 and annexes 1 to 4);
- .3 note the action taken by the Committee on issues related to ballast water management, in particular information on type approval of ballast water management systems that make use of Active Substances and an update on the experience-building phase associated with the Ballast Water Management Convention (section 4);
- .4 note the action taken by the Committee on issues related to air pollution and energy efficiency of ships, in particular the approval of circulars MEPC.1/Circ.884/Rev.1 on *Guidance for best practice for Member State/coastal State* and MEPC.1/Circ.850/Rev.3 on *Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*; the adoption of resolution MEPC.332(76) on *Amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.308(73), as amended by resolution MEPC.322(74))* and its consideration of the report of the fuel oil consumption data for the period from 1 January 2019 until 31 December 2019 (sections 5 and 6 and annexes 5 and 6);
- .5 note the action taken by the Committee on issues related to the reduction of GHG emissions from ships, in particular the approval, in general, of the report on the comprehensive impact assessment of the short-term measure and the invitation for concrete proposals to ISWG-GHG 10 on how to keep the impacts of the short-term measure under review and how to undertake a lessons-learned exercise; the adoption of seven sets of guidelines supporting the implementation of the short-term measure adopted through 2021 revised MARPOL Annex VI; and the approval of the Work plan for development of mid- and long-term measures as a follow-up of the Initial IMO Strategy on

- Reduction of GHG Emissions from Ships and the instruction to ISWG-GHG-10 to consider various relevant proposals (section 7 and annexes 7 to 14);
- .6 note the action taken by the Committee on the outcome of PPR 7 and PPR 8, in particular the approval of two MEPC circulars on addressing marine plastic litter from ships and the unified interpretations to the NO_x Technical Code 2008; and the endorsement of the evaluation of products and cleaning additives (section 9);
 - .7 note the action taken by the Committee regarding technical cooperation activities for the protection of the marine environment, including the approval of the revised thematic priorities related to the marine environment and the endorsement of the reinstatement of a dedicated global programme on reducing atmospheric emissions from ships and in ports, and effective implementation of IMO's Initial GHG Strategy, for inclusion under the ITCP for the 2022-2023 biennium (section 11);
 - .8 endorse the following new outputs (paragraphs 12.3 and 12.5):
 - .1 "Review of the 2014 Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833) (2014 Guidelines) and identification of next steps", for inclusion in the biennial agenda of the SDC Sub-Committee for 2022-2023 and the provisional agenda for SDC 8; and
 - .2 "Development of an entrant training manual for PSC personnel" and "Development of guidance in relation to IMSAS to assist in the implementation of the III Code" for inclusion in the biennial agenda of the III Sub-Committee for 2022 -2023 and the provisional agenda for III 8;
 - .9 note the status report of the outputs of MEPC for the 2020-2021 biennium and the post-biennial agenda of MEPC (paragraph 12.7 and annexes 17 and 18); and
 - .10 note that the Committee approved the items to be included in the provisional agenda of MEPC 77 (paragraph 12.11 and annex 19).
- 15.3 The Maritime Safety Committee, at its 104th session, is invited to:
- .1 note that the Committee approved MEPC.1/Circ.884/Rev.1 on *Guidance for best practice for Member State/coastal State* and MEPC.1/Circ.850/Rev.3 on *Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions* (paragraphs 5.9 and 5.20);
 - .2 note that the PPR Sub-Committee has requested input from NCSR, SDC and HTW Sub-Committees in the context of developing draft guidelines on mitigation measures to reduce risks of use and carriage for use of heavy fuel oil as fuel by ships in Arctic waters (paragraph 9.9);
 - .3 note that the Committee approved the new output on "Review of the 2014 Guidelines for the reduction of underwater noise from commercial shipping

to address adverse impacts on marine life (MEPC.1/Circ.833) (2014 Guidelines) and identification of next steps", for inclusion in the biennial agenda of the SDC Sub-Committee for 2022-2023 and the provisional agenda for SDC 8 (paragraphs 12.3); and

- .4 note that the Committee took a decision concurrent with that of MSC 103 with regard to the inclusion of new outputs on "Development of an entrant training manual for PSC personnel" and "Development of guidance in relation to IMSAS to assist in the implementation of the III Code" in the biennial agenda of the III Sub-Committee for 2022-2023 and the provisional agenda for III 8 (paragraph 12.5).

15.4 The Technical Cooperation Committee, at its seventy-first session, is invited to:

- .1 note the action taken by the Committee on issues related to the reduction of GHG emissions from ships, in particular the adoption of 2021 revised MARPOL Annex VI introducing mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping and the approval, in general, of the report on the comprehensive impact assessment of the short-term GHG reduction measure (paragraphs 3.32 and 7.3 to 7.36);
- .2 note various requests for additional technical assistance, resource mobilization and data gathering to support States with the implementation of the short-term measure, and to consider ways to provide enhanced support in the first years of implementation of the short-term measure for reducing carbon intensity of international shipping (paragraphs 7.3 to 7.36);
- .3 note the action taken by the Committee regarding technical cooperation activities for the protection of the marine environment, including the approval of the revised thematic priorities related to the marine environment and the endorsement of the reinstatement of a dedicated global programme on Reducing atmospheric emissions from ships and in ports, and effective implementation of IMO's Initial GHG Strategy, for inclusion under the ITCP for the 2022-2023 biennium (section 11); and
- .4 note that the Committee, in approving a new output on "Review of the 2014 Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833) (2014 Guidelines) and identification of next steps", requested the Secretariat to discuss with potential donors, such as GEF, regarding the potential funding of a global underwater vessel noise project (paragraph 12.3).

(The annexes to this report have been issued as documents MEPC 76/15/Add.1 and MEPC 76/15/Add.2)